

FERTILITY ATTITUDES AND BEHAVIOR:
THE EFFECTS OF GENDER EQUITY ON FERTILITY IN
SOUTH KOREA

BY

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DISSERTATION

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ABSTRACT

This dissertation examines the roles of gender equity and family in shaping lowest-low fertility. Although low fertility is a heated topic in most advanced societies, conventional approaches to low fertility, such as the second demographic transition theory, have predominantly focused on low fertility in Western countries. Recent literature on low fertility demonstrates that gender equity plays an important role in understanding cross-national variations in low fertility. This project uses South Korea to examine issues of low fertility and its association with the role of family and gender equity. South Korea is marked by low institutional gender equity, a strong normative focus idealizing the two-child family and extremely low fertility. In order to integrate the case of South Korea as critical to a theoretical understanding of the impact of gender equity, this dissertation explores the ways in which women shape their fertility intentions and actual fertility in relation to gender equity.

Using data from the three waves of the Korean Longitudinal Survey of Women & Families, I examined the intersection of low fertility, marriage, and family with an emphasis on the role of gender equity in explaining lowest-low fertility in South Korea. In examining four aspects of gender equity in the family, my findings suggest that South Korean women with traditional gender role attitudes may face high levels of pressure to fulfill their expected roles in the family, including raising a high-quality child, with no or little support from husbands and institutions. Moreover, my findings suggest that women's positive interactions with their husbands, based on the sharing of housework and childcare or educational responsibility for their children, provide favorable conditions for women's marital quality. My analysis emphasizes that having a second child is likely to be a constrained choice dependent on supportive environments for the family. The availability of tangible support from multiple sources may determine the gap between fertility intentions and fertility behavior, especially in contexts where two-child family ideals are still pervasive.

I have brought a new perspective to the growing body of literature on low fertility, a perspective that is especially suited to cultural contexts in which high educational aspirations and the traditional family model are pervasive. This research makes two main contributions to the literature on gender and low fertility. First, it demonstrates the mechanisms through which gender equity in the family shapes women's marriage and fertility, both in terms of women's fertility behavior and realizing their fertility intentions. Second, it offers new insights on the interplay between the state and the family in achieving family demands, including work-family balance and having an additional child. It further increases our understanding of the different contexts that are revealed in a rapid fertility decline, lowest-low fertility, low gender equity regimes, and weak institutional support for childrearing.

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CHAPTER 1

INTRODUCTION

This dissertation examines the roles of gender equity and family in shaping lowest-low fertility. Although low fertility is a heated topic in most advanced societies, conventional approaches to low fertility, such as the second demographic transition theory, have predominantly focused on low fertility in Western countries. Recent literature on low fertility demonstrates that gender equity plays an important role in understanding cross-national variations in low fertility, mainly in Europe. Simultaneously, scholars have paid their attention to changes in sustained very low fertility in Europe, which led them to coin the term lowest-low fertility, a level of the total fertility rate at or below 1.3 (Kohler et al. 2002: 641).

Ironically, there is profound evidence that women's desires for larger families, typically with two children, continue across most advanced countries, even including some of the countries indicating lowest-low fertility (e.g., Sobotka and Beaujouan 2014). The gap between fertility attitudes and actual behavior is a notable aspect in understanding low fertility. Scholars, including Bongaarts (2001; 2002) and Morgan (2003), demonstrate that this discrepancy between actual fertility and desired family size is a new phenomenon, and it results from the interplay between fertility-enhancing factors and fertility-depressing factors in developed countries. Achieving the two-child family ideal can be a severely constrained choice depending on individuals' socio-structural conditions and an embedded institutional context. How do women negotiate within their structural conditions, as well as the institutional context, to achieve their fertility goals? What factors play a significant role for a possible exit from the lowest-low fertility?

This project uses South Korea to examine issues of low fertility and its association with the role of family and gender equity. The recent and rapid declines in fertility across East Asia may provide unique avenues for the examination of variation within a national setting. South Korea is an East Asian country that has experienced a relatively recent rapid decline in fertility and records one of the lowest fertility rates at below 1.2 in 2014. Concurrently, the majority of adults express their ideal family size as a two-child family, and some of them express a desire for three children. All told, Korea is marked by low institutional gender equity, a strong normative focus idealizing the two-child family and extremely low fertility. This dissertation explores the ways in which women shape their fertility intentions and actual fertility in relation to gender equity. The fundamental element for understanding levels of gender equity is the role of social institutions, including the state, marriage and the family.

MOTIVATIONS

There is a great deal to be gained from understanding the relationship between gender equity and low fertility both in general and in South Korea specifically. Korea is an excellent case study for expanding our understanding of the relationship between gender equity and fertility, given its unique timing with regard to the rapid decline in fertility and persistent normative ideas of a two-child family. The fall in the total fertility rate¹ (TFR) from 3.43 in 1975 to 1.19 in 2014 in South Korea is drastic (Statistics Korea 2014). Low fertility in South Korea may be a constrained choice reflecting gender inequality, increasing psychological burdens in raising children, and economic realities. Understanding how the unique South Korean societal context shapes fertility attitudes and behavior will help to broaden understanding of the

¹ Total fertility rate refers to the average number of children that women would expect to have throughout her childbearing years, following the age-specific fertility rates for that year (Population Reference Bureau 2014)

relationship between gender equity and fertility by extending the existing literature on the topic and providing understudied aspects of gender equity uniquely situated in non-Western low fertility contexts. I seek to determine what factors affect women's fertility attitudes and actual behaviors under the institutional constraints of low fertility, highlighting the role of gender equity and family in shaping different fertility attitudes and behaviors at the individual level. A greater understanding of the mechanisms of low fertility in South Korea also has practical implications for policymakers interested in population dynamics as well as gender equality in the family in South Korea and elsewhere.

Contribution to Theory

Studies of low fertility have emphasized the importance of the relationship between gender equity and fertility over the past decade. Peter McDonald's (2000a; 2000b) theory of gender equity postulates that very low fertility is attributed to the incoherence in levels of gender equity between individual-oriented institutions (e.g., education and employment) and family-oriented institutions in a society. McDonald compares fertility variations among European countries and argues that countries with very low fertility, such as Southern European countries, show great inconsistency in levels of gender equity, due to high levels of gender equity in individual-oriented institutions versus low levels of gender equity in family-oriented institutions. The gender equity theory is intended to explain fertility variations across countries by emphasizing the levels of gender equity at the institutional level (McDonald 2013).

There is a growing body of literature which aims to provide new theoretical insights into the relationship between gender equity and fertility in economically advanced countries (e.g., Anderson and Kohler 2015; Esping-Andersen and Billari 2015; Goldscheider, Bernhardt, and

Lappegård 2015). An important theme arising from this literature is that gender equity regimes, linked to socioeconomic development and societal contexts, are a key driver of trends in low fertility among advanced countries. Yet scholars have not critically assessed the effect of gender equity *within* the non-Western institutional context of lowest-low fertility.

Although the existing theories partly include East Asian countries in the framework of gender equity and low fertility, there is scant research examining the link between gender equity and fertility within a single context. A more elaborative theoretical framework highlighting the importance of gender equity is necessary for understanding fertility variations within a country. The South Korean context combines strong traditional gender norms in the private sphere with high human capital and a rapid decline in fertility during the period of demographic transition (Anderson and Kohler 2015). The emergence of lowest-low fertility in South Korea is fairly recent, and creates a substantial mismatch between strong two-child family ideals and actual individual fertility. South Korea therefore provides an opportunity to investigate the relationship between gender equity and fertility, and family more broadly, in a context characterized by low levels of gender equity embedded in patriarchal gender relations.

Policy contributions

In order to examine issues of gender equity and fertility in South Korea, I will utilize publically available data from a nationally representative longitudinal survey. Low fertility and (relatedly) population ageing are high priority issues for many advanced countries' governments, including the South Korean government; and they are also important issues for international population and family policy initiatives. One of the biggest concerns relating to very low fertility for policy makers is associated with the future existence of peoples concerned (McDonald

2000a). A small difference in the TFR can lead to substantially different demographic and social consequences. For instance, a TFR of 1.3 in South Korea implies that the size of the stable South Korean population will be fall to 50 percent of its initial size in 45 years.² In a stable population with TFR of 1.0, the population's halving times are only 29 years (Kohler et al. 2002: 642). Low fertility rates are not only an important demographic and social issue in Korea, but they also reflect individuals' constrained agency due to structural and individual constraints. My work will shed light on women's resilience in making their reproductive choices and identify non-institutional support within the institutional constraints.

Understanding the underlying causes of low fertility and developing programs and policies to facilitate reproductive agency is urgently needed in addressing issues of low fertility. The experience of very low fertility in countries within the European Union (EU) suggests that a comprehensive understanding of patterns of low fertility and identifying its main correlating factors is useful in policymaking. For example, there are scholarly debates whether the governments in Europe should push for gender equality to increase fertility (Neyer 2011; Oláh 2011; Philipov 2011; Toulemon 2011). In a similar vein, my project makes a valuable contribution to understanding the social implications of low fertility in South Korea by increasing our knowledge of the link between gender equity and fertility in the specific context of South Korea. By integrating the case of South Korea into the debate, and by making it critical to the theoretical understanding the impact of gender equity, my research provides insight into the design of policy intervention for low fertility countries.

² Stable populations refer to theoretical models having age-specific fertility and mortality rates that remain constant over time (Rowland 2003: 300-306).

THEORETICAL BACKGROUND

Previous literature has examined the effects of demographic, socioeconomic, ideational, and institutional factors on fertility, and a lot of that literature has focused on substantial fertility differences within and across countries. Ample studies have also investigated women's or couples' childbearing decision-making processes by identifying factors that either facilitate or inhibit fertility. More recently, scholars have examined differences between fertility intentions and actual fertility, which have been observed in most countries at the end of their fertility transitions (Balbo and Mills 2011; Bongaarts 2001; Morgan and Taylor 2006). This dissertation adds to studies of low fertility by extending current frameworks to better emphasize the role of gender equity with an empirical investigation of South Korea, the country with the lowest fertility rate in the world. Drawing on multiple theories closely related to the importance of gender equity and the family, this dissertation extends our knowledge by conceptualizing and operationalizing gender equity at the micro-level and examining the role of gender equity in relation to the impact of family network and individual social characteristics, with the aim of providing a more comprehensive understanding of individual fertility differentials and of the mismatch between fertility intentions and achieved fertility *within* a non-Western lowest-low fertility country.

In this section, I first examine the literature on low fertility with a special emphasis on the role of gender equity. I then examine the evidence for the impact of gender equity at both macro- and micro-levels. I pay special attention to the potential aspects of gender equity affecting women's fertility decision-making, specifically in the context of South Korea, and in East Asia more broadly. While there is a growing body of literature concerning the gap between fertility intentions and outcomes which links the effect to demographic or socioeconomic factors, there is

limited evidence on how gender equity shapes the mismatch between fertility intentions and outcomes and the role gender equity plays in the context of patriarchal gender relations and little institutional support for gender equality. Investigating a case with different contextual and institutional backgrounds will provide a better understanding of what gender equity means in this specific context and the different ways it plays out in concert with country-specific institutional environments.

Gender Equity and Fertility

Evidence suggests that at the national level, the relationship between trends in female labor force participation and trends in fertility rates changed from negative to positive in the mid-1980s (e.g., Brewster and Rindfuss 2000; Del Boca 2002; Morgan 2003; Rindfuss et al. 2007). Sociologists believe the formerly negative association between female labor force participation and fertility can be attributed to the difficulty of combining the demands of childrearing with those of employment (e.g., Brewster and Rindfuss 2000). However, recent evidence suggests that the association between women in the workplace and fertility rates is now positive, as economically advanced countries with high female labor force participation also tend to have higher fertility rates (e.g., Myrskylä, Kohler, and Billari 2009). Scholars call this phenomenon an upturn in fertility trends or a reversal of fertility trends.

The importance of gender equity has received increasing attention from sociologists seeking for an explanation of this upturn in fertility trends observed in economically advanced countries over the second half of the twentieth century. There are theoretical discourses emphasizing the impact of gender equity on fertility variations among economically advanced countries. McDonald (2000a; 2000b; 2013) views gender equity as a determinant of low fertility

and explains that the incoherence between the levels of gender equity in social *institutions* – sustained gender inequity in the institution of the family – has resulted in extremely low fertility among countries with below-replacement fertility levels.³ Low fertility emerges when many women perceive that their cultural and institutional context does not support job opportunities for working mothers (McDonald 2013). In this context, women react to the inequitable gender systems by having few or no children. In Southern European countries and advanced East Asian countries, for example, having children does restrict women’s opportunity for labor force participation, so that these countries have very low fertility rates.

Building upon an influential theoretical framework of gender equity by McDonald (2000a; 2000b), sociological literature examining low fertility emphasizes the importance of gender, often in tandem with levels of socioeconomic development and female labor force participation. McDonald’s notion of the inconsistency among levels of gender equity in social institutions is similar to what Hochschild (1989) labels “the stalled revolution” and, more recently, what Goldscheider, Bernhardt, and Lappegård (2015) refer to as “the gender revolution”. Goldscheider et al. (2015) propose an alternative theoretical framework to explain increasing evidence of a reversal in fertility trends. They posit that the reversal in fertility links to two stages of the ongoing gender revolution. The first half of the gender revolution leads to weakened families due to increased stresses on the family in relation to structural changes in women's roles in the public sphere. The second half of the gender revolution, on the other hand, brings in families strengthened (e.g., increased fertility) by increasing male involvement. What

³ Scholars often use gender equality and gender equity interchangeably. However, the concepts behind these two terms are distinct. Gender equality can be defined as equal outcomes for men and women in domains such as education, employment, wages or housework (Esping-Andersen and Billari 2015). However, gender equity is a subtler concept because it concerns perceptions of fairness and opportunities, which can result in different outcomes for men and women (McDonald 2013). Scholars believe that gender equity is an appropriate concept for studies of fertility, but it is difficult to measure at the societal level (Mills 2010; McDonald 2013).

Goldscheider et al. (2015) believe to be the reason for positive outcomes in the family (e.g., increasing fertility, union formation and union stability) is the importance of male involvement in the family for changing gender relationships. This approach makes their theory distinctive from the following two theoretical approaches, which highlight the importance of institutional interventions in changing gender relations.

In accordance with McDonald and Goldscheider and her colleagues, Esping-Andersen and Billari (2015) posit that family relationships should change reflecting new expectations towards gender-egalitarian family norms for pro-family outcomes, such as achieving the desired number of children. Esping-Andersen and Billari (2015) also argue that the normative standards of gender egalitarianism depend on country-specific institutional environments (e.g., levels of generalized trust) as these shape the speed of diffusion of gender-egalitarian norms to the entire population. In a similar vein, Anderson and Kohler (2015) agree that gender equity, which is closely linked to the onset and the pace of the socioeconomic development, is a key driver of fertility variation in economically advanced countries. However, they emphasize the pivotal role of time in creating a mismatch between institutional gender equity and household gender equity since their theory extends the phases of the demographic transition. Anderson and Kohler (2015) argue that changes in gender relations are imminent in East Asian countries such as South Korea because South Korea has not had enough time to achieve high levels of household gender equity.

The effect of gender equity on fertility at the macro-level

There is evidence that institutional interventions for shaping egalitarian gender relations positively affect fertility at the national level. The state's family policies, cash benefits, and childcare arrangements can reduce the conflict between work and family that women would

otherwise have; and their effects on fertility vary by countries. In her review of the literature linking policies and fertility, Gauthier (2007) concludes that evidence shows mixed findings about the impact of policies on fertility. Importantly, however, her review reveals that evidence based on micro-level data supports the hypothesis that policies produce a small positive impact on fertility, and that the impact varies according to country and parity.

Studies investigating the impact of policies associated with maternal or paternal leave and childcare characteristics on fertility at the individual level suggest mixed findings. Using data from Finland and Norway, Rosen (2004) suggests a positive impact of parental leave on fertility, but no significant impact of childcare provisions and child benefits on fertility. Hank and Kreyenfield (2003) also find no significant impact of public childcare availability on the probability of a first birth in Germany. In contrast, Del Boca (2002) suggests that the availability of childcare increases the likelihood of having a child in Italy. Rindfuss et al. (2007) also confirm the positive impact of childcare availability on the timing of having a first child based on data from Norway. Using the same data, Rindfuss et al. (2010) further suggest that the institutional arrangements for high-quality, affordable, worker-friendly childcare increase childbearing at every parity progression. However, the impact of institutional childcare arrangements tends to be lower without accompanying changes in gender equality or in other factors that influence women's achieving their desired family size, such as support from husbands (McDonald 2002; Rindfuss et al. 2010).

The effect of gender equity on fertility at the individual-level

The increasing importance of gender in fertility studies has stimulated a lot of empirical research testing its role in fertility decision-making at the individual level (Balbo et al. 2013;

Mills 2010). Although the reviewed theories aim to explain country-level variations in fertility, empirical applications have mostly conducted at the micro-level.⁴ Studies examining the individual fertility variations within a single context employ the gender division of household labor as a measure of household gender equity (Cooke 2009; Short and Torr 2004; Mills et al. 2008; Olàh 2003; Tazi-Preve et al. 2004). Sociologists linking low fertility to conflict between the roles of mothers and workers focus on the importance of support from husbands in terms of housework or childcare (e.g., Goldscheider et al. 2013; 2015). The remainder of this section discusses the existing measures of gender equity at the micro-level and further argues the necessity of diversifying measures of gender equity for the investigation of individual fertility variations within the context of lowest-low fertility. This review will pave the way for my core argument in the chapter 3, which incorporates educational responsibility for children into our understanding of household-level gender equity situated in contexts with high levels of investments in children's education, including South Korea and other East Asian countries.

Findings from several studies support a positive link between gender equity (reflected in contributions to housework) and fertility *intentions*. Neyer, Lappegård, and Vignoli (2013) find that among a sample of European women with one or two children, a more equal distribution of housework between a couple increases their likelihood of desiring an additional child. In Hungary, women sharing housework and childcare with their spouses are more likely to want a second child (Olàh 2003). Italian women who have one child and who bear more than 75% of the housework are less likely to express an intension to have a second child, in comparison with women who contribute a smaller share of housework (Mills et al. 2008). Data from Austria also indicates the importance of household actions over expectations, as sharing housework exerts a

⁴ See Mills (2010) for macro-level application of the theory of gender equity.

positive effect on desired fertility, while *attitudes* towards sharing housework exhibit no effect (Tazi-Preve, Bichlbauer, and Goujon 2004).

Evidence also supports a relationship between gender equity within the family and individual fertility *outcomes*. Findings support a positive link between fathers' sharing of housework or childcare and having a second child in the U.S. (Torr and Short 2004) and Italy (Cooke 2009). In Sweden, where family policies are more egalitarian, a discontinuity between attitudes towards gender roles in housework and actual housework behavior reduces the likelihood of having a second child (Goldscheider, Bernhardt, and Branden 2013).

Previous fertility research operationalizes household gender equity in several ways. These include the relative share of housework or childcare between a couple (Cooke 2009; Mills et al. 2008; Oláh 2003; Torr and Short 2004), women's satisfaction with the division of housework or childcare (Neyer et al. 2013) and gender role attitudes within the family (Goldscheider et al. 2013). Different aspects of gender relations within the family may be more significant contingent upon national gender equity regimes (Miettinen, Bastern and Rotkirch 2011). Across existing research, male contributions to housework and childcare play a key role in shaping fertility intentions and outcomes, particularly in longstanding low fertility and low gender equity countries such as Italy (Miettinen et al. 2011) and Hungary (Oláh 2003).

South Korea provides an interesting case of a rapid fertility decline, lowest-low fertility, low gender equity and weak institutional supports for child rearing. Will men's participation in housework and childcare positively affect fertility realization in South Korea, as they do in Europe? In chapter 3, I explore how the relationship between gender equity within the family and individual fertility may work differently in concert with the unique gender equity contexts of South Korea. To reflect a unique cultural emphasis on education, I expand gender equity theory

to incorporate patterns of decision-making about children's education. A significant difference between my dissertation and previous empirical studies examining the role of gender equity at the micro-level building upon the framework of gender equity will lie in its extended attitudinal and experiential aspects of gender equity reflecting the unique context of South Korea, a phenomenon sometimes referred to as "educational fever" (Anderson and Kohler 2013).

Gender Equity in the Family, Marital Quality, and Fertility

The Division of Household Labor and Marital Quality

In his review of the research on household labor during the 1990s, Coltrane (2000) pointed out that most studies explained the operationalization of housework or household labor in the analysis with no explicit definition of the concept. However, household labor has consistently been conceptualized in the literature as "unpaid work done to maintain family members and/or a home" (Shelton and John 1996: 300). The tasks included in the conceptualization of household labor vary by study and social context. However, some tasks are commonly classified as part of household labor: housecleaning, meal planning, cooking, dishwashing (or loading the dishwasher), cleaning up after meals, grocery shopping, laundry (washing, ironing, and mending clothes), caring for sick family members, taking out the garbage, paying bills, and transporting family members (Arrighi and Maume 2000; Badr and Acitelli 2008; Cunningham 2007; Lincoln 200). Housework often means *routine tasks* (usually performed by women) requiring on-going and time-consuming labor, such as laundry, cooking, cleaning up after meals and doing dishes (Lachance-Grzela and Bouchard 2010).

Although we have observed unprecedented changes in women's participation in the labor force during the last several decades, it is well documented that women in many countries,

including the United States, continue to perform the majority of unpaid tasks in their homes (Lachance-Grzela and Bouchard 2010). Family sociologists have called this phenomenon the “stalled gender revolution” (England 2010) or the “incomplete gender revolution” (Esping-Anderson 2009). Among three main micro-level theoretical perspectives identified by Lachance-Grzela and Bouchard’s (2010) comprehensive review of the literature⁵, gender ideology perspective connects the gendered division of household labor to the sense of fairness and its link to marital quality.

The gender ideology perspective posits an inverse relationship between the unequal division of household labor and egalitarian gender attitudes (Davis et al. 2007). It is more useful in explaining women’s participation in household labor than in explaining men’s (Bianchi et al. 2000). Several empirical studies support this hypothesized relationship between the division of household labor and gender role attitudes (e.g., Davis et al. 2007; Fuwa 2004; Knudsen and Wærnæs 2008; Parkman 2004). Fuwa (2004), for instance, finds that women holding egalitarian gender attitudes are likely to spend less time on housework than women holding traditional gender attitudes.

Along similar lines, gender construction perspective, a variant of gender ideology perspective, also helps us understand the gendered division of household labor. This perspective is based on the view of gender as a “primary cultural frame for organizing social relations” (Ridgeway 2009: 147). This theoretical perspective highlights the gendered meanings of performance of household labor in relation to gender relations in the family, indicating appropriate behaviors and responsibilities for men and women (Bianchi et al. 2000; Doucet 2006;

⁵ Two other theoretical perspectives include the relative resource perspective and the time availability perspective. Since this dissertation is not intended to examine the determinants of division of household labor, I do not provide extensive discussion of these two theoretical perspectives. See Coltrane (2000)’s and Lachance-Grzela and Bouchard’s (2010) review articles and Toth (2008)’s dissertation on the division of household labor for a comprehensive review.

Erickson 2005). Using this theoretical perspective, Bianchi et al. (2000: 195) state that women's greater investment in performing household labor reflects female gender norms and expectations of competent wives and mothers.

Sociological research has viewed gender role attitudes as an important correlate of the division of labor, both in terms of the number of hours spent on household labor and the perceived fairness of the division of household labor. Coltrane's (2000) extensive review suggests that more equal sharing of household labor increases marital satisfaction and reduces couples' experience of conflict. A number of more recent studies also find that women's relationship quality decreases when they perceive the sharing of household labor to be unfair (e.g., Frisco and Williams 2003; Mikula, Riederer, and Bodi 2012; Wilcox and Nock 2006). Gender role attitudes play a part in this relationship. For instance, Greenstein (1996) finds that perceived unfairness of the division of household labor has a stronger negative impact on marital quality for wives holding egalitarian gender role attitudes than for wives holding traditional attitudes. Greenstein (2009) further consolidates his argument in his comparative study by showing that women's share of household labor negatively influences perceived fairness of the division of household labor and women's family satisfaction. Importantly, these studies highlight the special significance of this relationship between the division of household labor and marital quality. Amato and his colleagues (2007) also report that husbands' share of housework has a positive effect on women's marital happiness and has a negative effect on marital problems or divorce proneness.

This theoretical stand may accord with Hakim's (2000; 2003) preference theory. Hakim (2003: 350) highlights personal values and decision-making at the micro-level and views women's heterogeneity in lifestyle preferences as an explanation of trends in family formation,

family arrangements, and fertility rates. Women's attitudes and values are at the center of classifying sociological ideal-types of women's lifestyle preferences: home-centered, adaptive, and work-centered (Hakim 2000). The distribution of the three lifestyle preferences varies by societies based on different available options and opportunities for women (e.g., public policies) within their given historical and institutional conditions.

Using data from the 1999 British survey, Hakim (2003: 363) shows that approximately 40 percent of home-centered women have full-time jobs, while 22 percent of work-centered women are not employed. Her findings imply that certain life circumstances, including economic necessity, can lead to an inconsistency between personal preferences and actual choices. An important insight from the preference theory is that women's value systems, aspirations, and life goals vary – which, in turn, leads to different lifestyle preferences and relatedly different fertility decision-making. This point may have an implication for understanding women's evaluation of their marital experiences and fertility decision-making. I will discuss my specific hypotheses regarding the relationship between gender role attitudes and the division of household labor in chapter 4.

Marital Quality and Fertility

Family researchers have studied correlates of marital quality since the 1960s. The initial areas of research were marital happiness (often also referred to as marital satisfaction) and marital stability (Hicks and Platt 1970; Spanier and Lewis 1980). Although researchers employ different operational definitions of the quality of marital relationship or marital satisfaction, they have increasingly called it “marital quality” (Johnson et al. 1986). As family researchers have continuously examined new correlates of marital quality, including demographic and social

factors, the quality of marital relationships continues to be a core area in the field (Spanier and Lewis 1980).

The term *marital quality* has gained greater usage in the literature since it includes diverse aspects of marriage which were previously studied as separate dependent variables (Spanier and Lewis 1980). Lewis and Spanier (1979) define marital quality as “the *subjective* evaluation of a married couple’s relationship on various dimensions and evaluations” (p. 269), which covers marital adjustment, satisfaction, happiness, marital interaction, disagreements, and proneness to divorce or separation. Although their scale includes both positive and negative dimensions, it is controversial whether these dimensions are conceptually and empirically distinct (Sharpley and Cross 1982; Spanier and Thompson 1982). Building upon this approach to marital quality as a multidimensional concept, Johnson and his colleagues (1986) proposed five components of marital quality, including marital happiness, marital interaction, marital disagreement, marital problems, and marital instability. Using confirmatory factor analysis, they formed a two-dimensional structure of marital quality: a positive dimension comprised of interaction and happiness, and a negative dimension comprised of problems, disagreements, and instability. They warn against constructing a summation of elements from the two different dimensions since this can obscure the potential relationship between marital quality measures and independent variables in the analysis (Johnson et al. 1986: 45). Following Johnson et al.’s (1986) study, many empirical studies of marital quality since the late 1980s build upon this multidimensional approach to marital quality (e.g., Amato and Booth 1995; Rijken and Liefbroer 2009).

Some studies examine fewer dimensions of marital quality, depending on their theoretical focus and the availability of data. For instance, Amato and his colleagues (2003) examined the

stability of marital quality over time in the U.S. with three marital dimensions: marital happiness, marital interaction, and divorce proneness. Furthermore, many studies still focus on one specific dimension of marital relationship, such as marital happiness or satisfaction.

One of the correlates of marital quality that literature has studied extensively is having children, or more specifically, the influence of having children on marital quality (e.g., Glenn 1989; Helms-Erickson 2001; Keizer and Schenk 2012; Kurdek 1999). In their longitudinal study, Keizer and Schenk (2012) suggest a U-shaped association between relationship satisfaction and the transition to parenthood, meaning couples became less satisfied with their relationship after the first birth, but their satisfaction rebounds when the child reaches school age. Surprisingly, however, the literature has paid little attention to the opposite mechanism: the influence of marital quality on fertility behavior.

Evidence about the influence of marital quality on fertility is sparse. Previous studies examining this relationship mainly focused on the effect of stable relationships on fertility (Rijken and Liefbroer 2009; Rijken and Thomson 2011). Research has identified two opposing mechanisms in the relationship between relationship stability and fertility. One point of view finds that a stable marital relationship increases the chances of having a(nother) child. Put differently, marital *instability* is negatively associated with childbearing. The growth of unstable relationships, including high rates of divorce, has brought increased attention to the influence of a union's stability or relationship quality upon childbearing (Balbo et al. 2013). Moreover, in contexts in which childbearing decision-making is based upon a couple's joint decision, stable partnerships are considered the most important factor for childbearing (Thornton and Young-Demarco 2001). Lillard and Waite (1993) hypothesized that couples who are likely to separate are more likely to delay childbearing, and this postponement also leads to longer birth intervals.

Couples perceive that having children will increase the cost of marital dissolution, so couples with higher levels of marital instability are less likely to have a child. Lillard and Waite's (1993) and Myers' (1997) findings support this theoretical stance.

Conversely, building on the rational choice model of fertility, Friedman, Hechter and Kanazawa (1994) propose that union instability is positively associated with childbearing since having children is a method of reducing uncertainty within marriage and enhancing marital solidarity in developed societies. They assume that rational couples seek to reduce uncertainty in their marriage by having a child, thereby increasing spouses' dependence on each other and improving marital solidarity. They take into account the risk of divorce as an example of uncertainty in the marriage and conceptualize marital solidarity as the multi-stranded quality of the relationship based on financial ties, occupational ties, and ties of common interest (Friedman et al. 1994: 386).

As mentioned above, reviewed studies mainly focused on the role of marital (in)stability on the likelihood of childbearing (Rijken and Liefbroer 2009). However, studies based on social-psychological perspectives have suggested that marital quality is a multidimensional concept and marital stability is but a single aspect of the marital relationship (e.g., Amato and Booth 1997; Bradbury, Fincham, and Beach 2000; Johnson et al. 1986). Drawing on the multidimensional approach to marital quality, more recent studies examine the relationship between marital quality and fertility and suggest a more complicated relationship between the two. Using data for Dutch couples, for instance, Rijken and Liefbroer (2009) measured marital quality as a multidimensional concept, including positive and negative interaction, value consensus, and separation proneness. They provided evidence of the curvilinear relationship between marital quality and the timing of births. Couples were most likely to give birth when they experienced a

medium-quality relationship (i.e., having neither excessively negative nor excessively positive interactions) with partners.

With these theoretical perspectives in mind, in chapter 4, I investigate the link between the division of household labor and women's satisfaction with it, depending on women's gender ideology. I further ask if an inconsistency between lifestyle preferences and actual lifestyle choices has a significant effect on women's marital quality and the likelihood of having a child.

The Gap between Fertility Attitudes and Fertility Behavior

A large body of literature focuses on the difference between fertility attitudes and behavior in both high and low fertility settings. Traditionally, in high fertility settings, demographers have studied the *unmet need for contraception*, which refers to “the discrepancy between women's fertility preferences and contraceptive use”, indicating that actual fertility is often higher than stated fertility preferences (Bradley and Casterline 2014:124). In low fertility settings, evidence suggests the persistence of two-child family ideals, even in countries that have recently shifted to very low fertility. There is a mismatch between stated fertility preferences and observed actual fertility in many contemporary developed countries, beginning with countries in Europe. This mismatch is referred to as *unmet demand for children* (Harknett and Hartnett 2014). Literature on low fertility documents that intended family size is higher than completed cohort fertility (Bongaarts 2002) as well as the period TFR (Hagewen and Morgan 2005).

Scholars assert that fertility intentions reflect a more concrete element of the respondents' decision-making process and their plans for action than their fertility preferences or attitudes (Hin et al. 2011). However, studies also suggest the disjunction between fertility intentions and fertility behavior. Harknett and Hartnett (2014) suggest that approximately 60 percent of

intended births are realized, based on data from 22 European countries.⁶ Furthermore, Harknett and Hartnett (2014) find heterogeneity in women's fertility aspirations even across low fertility countries. In Southern Europe, shaped by long-term low fertility and low gender equity regimes, women were far less likely to realize their fertility intentions. Long-term low fertility and low gender equity regimes led to the intended family size of less than two in Spain and Italy (Testa 2007), and in Germany as well (Harknett and Hartnett 2014).

Some countries, such as the United States, indicate a close correspondence between fertility intentions and actual fertility at the aggregate level. Does this mean women and men in these countries are able to achieve their fertility intentions? Using data from the NLSY79, Morgan and Rackin (2010) find that only approximately 40 percent of women realized their fertility intentions, and underachieving is more common than overachieving fertility intentions in the U.S. What factors facilitate or inhibit realizing fertility intentions?

A strong theoretical framework for the study of fertility intentions in demographic studies is the Theory of Planned Behavior (TPB) (Ajzen 1988; Ajzen and Fishbein 2005). The TPB posits that childbearing is a purposeful behavior that is positively dependent on fertility intentions. Attitudes, subjective norms, and perceived behavioral controls function as the determinants of fertility intentions. Drawing this theory, studies concerning the relationship between fertility intentions and fertility behavior investigate the predictive power of fertility intentions (e.g., Liefbroer 2008; Quesnel-Vallée and Morgan 2003; Spéder and Kapitány 2009). While the TPB highlights the relationship between fertility intentions and fertility behavior, the theory also provides a link between personal characteristics and contextual factors – reflecting institutional policy – and fertility intentions and behavior (Ajzen and Klobas 2013). Bongaarts

⁶ All except for Turkey (TFR of 2.2) have fertility below replacement level (1.25 to 1.96).

(2001) also proposes an integrated theoretical framework focusing on the role of proximate factors, including age at childbearing, child mortality, and competing preferences, etc., which either enhance or reduce fertility relative to a desired family size. Bongaarts views the desired family size as the most influential determinant of fertility.

Determinants of fertility

Empirical evidence concerning determinants of fertility suggests mixed findings about the role of personal characteristics, including demographic and socioeconomic factors. There are contradictory results concerning whether women's education facilitates or inhibits realizing fertility intentions. In high gender equity regimes such as the Netherlands and France, highly educated women are more likely to realize their fertility intentions for a second child (Balbo and Mills 2011; Testa and Toulemon 2006), whereas highly educated women are *less* likely to meet their preferred fertility goals in low gender equity regimes such as the U.S. (e.g., Morgan and Rackin 2010). In addition to education, other demographic and socioeconomic variables associated with the realization of fertility intentions include age, employment (Spéder and Kapitány 2009) and sib-ship size (Balbo and Mills 2011). Compared to older women, younger women are more likely to realize their fertility intentions in Europe (Harknett and Hartnett 2014). Hungarian working women are more likely to realize their fertility intentions relative to having an unintended birth (Spéder and Kapitány 2009). A large family of origin (i.e., sib-ship size) positively affects higher fertility aspirations for a second child (Balbo and Mills 2011).

Parity is an important factor in determining fertility realization. The rationales behind having one child versus having subsequent children are typically viewed as qualitatively different. Affective reasons may account for having a first child, while additional children relate

to “family building” (Bulatao 1981). Once people have children, especially people at parity two or higher, they are more likely to abandon additional fertility intentions (Spéder and Kapitány 2009). In low fertility studies, second births serve as a critical decision point, because having two children is normative in industrialized countries (Goldscheider et al. 2013; Morgan 2003; Torr and Short 2004). What do we know about the correspondence between fertility attitudes and fertility behavior in a context characterized by a rapid fertility decline coupled with a strong normative ideal of the two-child family? These individual characteristics may play different roles in shaping fertility aspirations and realization in a different context of gender equity and the family. Moreover, having a second child may be a critical decision in a context in which high emphasis on children’s education is normative. I will discuss the contextual importance in the research setting section.

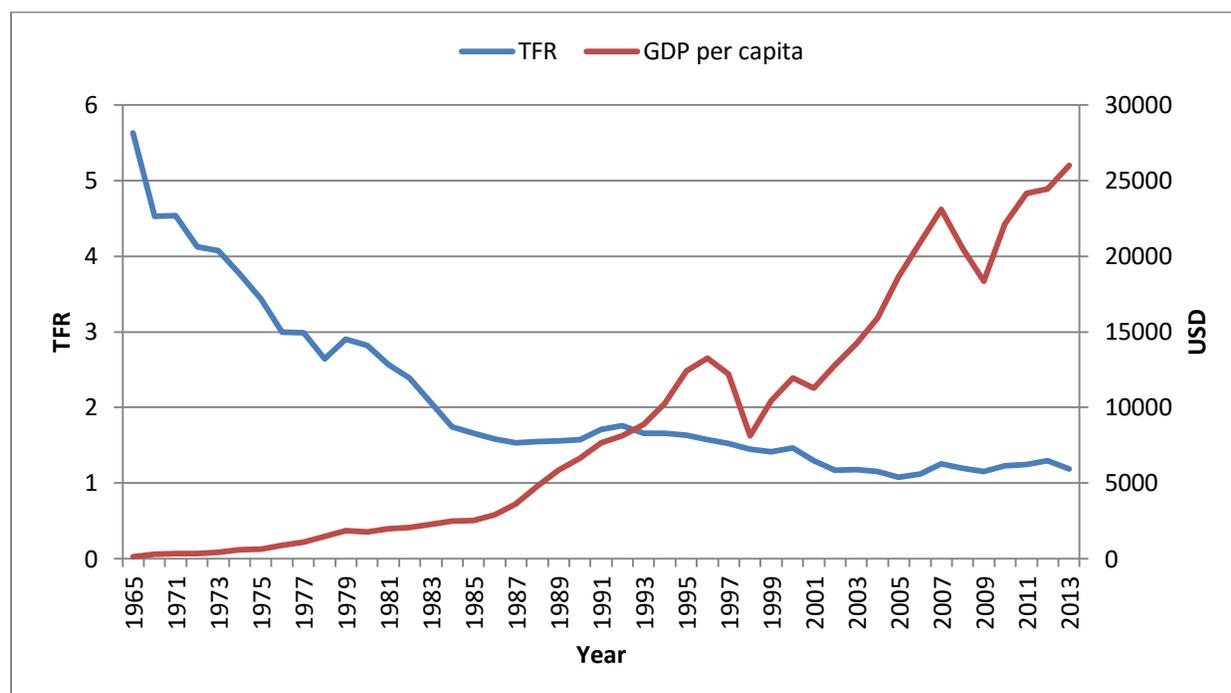
RESEARCH SETTING

Fertility Decline and its correlates in South Korea, 1965-1984

The decline in fertility rates in South Korea was dramatic in terms of both speed and sheer magnitude. Figure 1 illustrates the trend in TFR and GDP per capita in South Korea from 1965 to 2013. The South Korean government played an important role in fertility decline. Induced abortion was frequently practiced in urban areas in the 1960s as a method of birth control, and women’s age at marriage continued to increase (Kim 2005; Kwon and Kim 2002). The TFR in South Korea was 5.6 in 1965, a few years after the Korean government launched the National Family Planning Program in 1962 to reduce the levels of unwanted fertility and the desired family size (Choe and Park 2006; Choe and Retherford 2009; Tsuya et al. 2009).

The National Family Planning Program was a part of First (1962-1966) and Second (1967-1971) Five-Year Economic Development Plans, which spread the ideas that having a smaller family offers a better life and a more affluent country. The GDP per capita in South Korea increased from 104 USD in 1962 to 317 USD in 1971 and to 2,542 USD in 1985, as Figure 1 depicts. In corresponding to socioeconomic changes since the early 1960s, the TFR in South Korea reached its replacement-level by early 1980's. South Korea is viewed as a representative case showing dramatic economic development within a relatively short period of time, as represented by the rapid growth in the GDP per capita over time. This rapid economic development, in turn, led to rapid industrialization and urbanization. Chang (2010) conceptualizes this whole process as *compressed modernity*, characterized by the coexistence of mutually disparate historic and social elements. Compressed modernity is a "condition in which economic, political, social, and/or cultural changes occur in an extremely condensed manner in respect to both time and space" (Chang and Song 2010: 544). Classical understanding of fertility decline, such as demographic transition theory or Caldwell's wealth flows theory, may well explain the fertility decline from the 1960s to the 1980s as society became industrialized and urbanized: the old family structure had dissolved, and this in turn made high fertility irrational (Notestein 1953; Caldwell 1982).

Figure 1 Total period fertility rates and GDP per capita, South Korea, 1965-2010



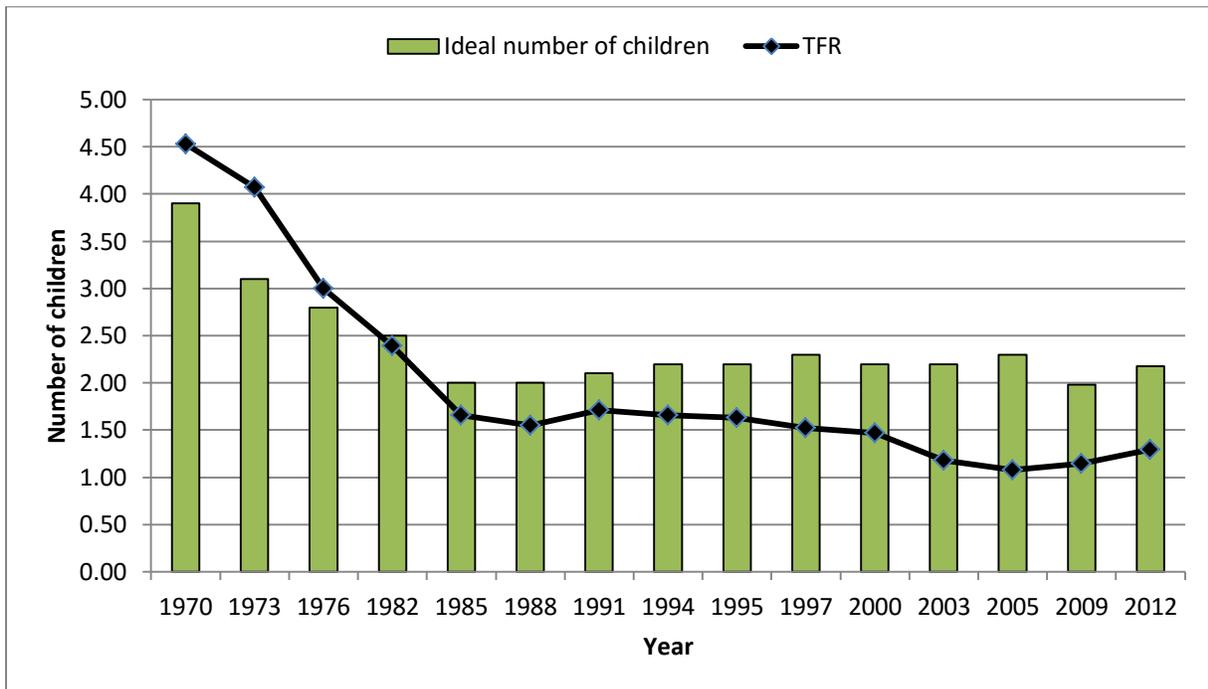
Source: Korean Statistical Information Service, World Bank

Fertility Decline and its correlates in South Korea, 1985- present

The TFR descended below replacement fertility in the two decades following 1965, and the decline did not stop until 2005 when South Korea recorded its lowest-ever fertility rate of 1.1. Since the mid-1980s, there is a notable change in terms of the relationship between fertility attitudes and actual behavior. Figure 2 illustrates that there is a mismatch between the ideal number of children and the period total fertility rate, except for the year of 1982. Before 1982, the ideal number of children was higher than the average number of children that women would expect to have throughout her childbearing years. The ideal number of children stays approximately 2 children or slightly higher than 2 children throughout the observed years since 1985. On the contrary, the fertility rate continued to decline to near 1.1 in 2005 and currently stands at a mere 1.3 in 2012. Meanwhile, the South Korean government continued to strengthen

its family planning programs to promote the one-child family as the ideal size during the 1980s, and the government abandoned that anti-natalist policy in 1988 (Tsuya et al. 2009). Korea's population policy eventually switched toward pronatalist in 2004 and announced the First Basic Plan for Low Fertility and Aged Society in 2006 (Jones 2011).

Figure 2 Trends in married women 15-44 perceived ideal number of children (average) and the TFR, South Korea, 1970-2012



Source: Korean Statistical Information Service

In South Korea, education is one of the top priority tasks of family since education is viewed as a best means of upward social mobility and economic prosperity (Park, Byun, and Kim 2011). College is a near universal aspiration in South Korea, even in the face of rising costs. Specifically, 94% of parents report that they want their children to receive at least a bachelor's degree, and 30% of those expect their children to attend graduate school, according to Social

Survey conducted in South Korea in 2012. As such, South Korea exhibits very high levels of human development, based on international rankings such as the Human Development Index (HDI). Moreover, parents are expected to produce “high quality” children via immoderate investment in childhood education, driven by the competitive economic environment, especially since the 1997 economic crisis (Anderson and Kohler 2013; Eun 2007). All these conditions contribute to increasing investments needed for children and the necessity of work due to the rising cost of living.

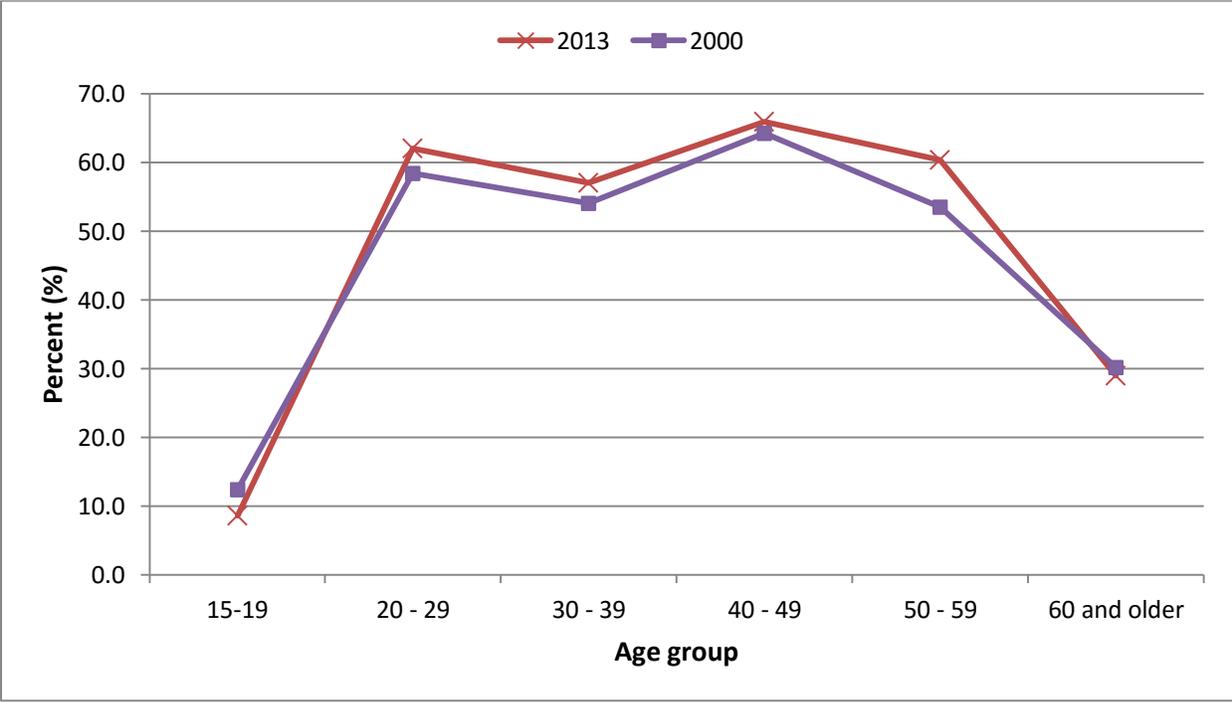
The cost of education produces more economic and social pressure for South Korean parents than any other cost. Recently, for example, Statistics Korea reported that in Seoul, about 8 out of 10 parents with children in primary or secondary education feel economic pressure due to the cost of their children’s education.⁷ The economic pressure perceived by parents corresponds to the percentage of students receiving at least one kind of private education in the primary and the secondary schools. According to the 2014 Private Education Expenditure Survey conducted by Statistics Korea, approximately 70% of students in primary school, middle school, or high school participated in at least one kind of private education (Statistics Korea 2015). The total amount of money spent by these students’ parents for their children’s private education was slightly over 18 trillion Korean Won (approximately \$15 billion USD) (Statistics Korea 2015). In turn, this is equivalent to spending approximately \$200 USD on children’s private education per month. Although the amount of money spent per student for private education has slightly decreased since 2007, these figures are relatively conservative.

Rising incomes and gains in female educational attainment have occurred at the same time as rising female participation in the labor force. Female labor force participation in South Korea has been on the rise over the past three decades, from 37.2% in 1965 to 50% in 2013

⁷ <http://news.mk.co.kr/newsRead.php?year=2013&no=297221> (Retrieved in May 7, 2013).

(KOSIS 2015). Since the female labor force participation rate reached 50% in 2005, it has been stagnant. South Korea does show lower rates of female labor force participation than the average for OECD, characterized by an M-shaped curve. Figure 3 depicts the M-shaped curve of the female labor force participation in 2000 and 2013. The female labor force participation rate was 49.2% in 2000 and 50% in 2013. The overall rate is not substantially different. A large proportion of women leave the labor force upon marriage and the birth of their first child, rejoining the labor market when their children reach school age (age 7). As children begin formal schooling, women may need to rejoin the labor market either to pursue their individual careers or from economic need (including the costly support of their children’s education).

Figure 3 Female labor force participation rate by age group, South Korea, 2000, 2013



Source: Korean Statistical Information Service

Certain factors contribute to the M-shaped curve of the female labor force participation rate and its stagnant aggregate-level rates. Strong beliefs in gendered childcare expectations and the absence of childcare facilities yield the M-shaped female labor force participation, as women are forced to drop out of the labor market while children are young (Eun 2007). Strong beliefs in gendered childcare expectations are embedded in historically rooted unequal patriarchal gender relations. Unequal divisions of labor within the family reflect strong traditional gender role expectations. Findings based on the 2009 Korean Time Use Survey reveal that, among dual-earner couples, women do 4.2 times as much housework and childcare as their husbands (Lee 2014). Neither women's contribution to household income nor their gender role attitudes are shown to increase husbands' contributions to housework or childcare (Lee 2014). In comparison, countries with egalitarian gender relations reveal substantially different results in terms of time spent on unpaid domestic work by gender. For instance, Dutch women spend 2.4 times more and Australian women spend 1.8 times more on unpaid domestic work than their male counterparts, respectively (United Nations Development Programme (UNDP) 2003).

The absence of childcare facilities is an example of weak institutional support for balancing work and family. Studies examining very low fertility in East Asia argue that the current social institutions— including family and the workplace— do not create family- and child-friendly environments, and this institutional condition is largely attributable to very low fertility (Chang 2003; Chung 2009; Eun 2007; Frejka et al. 2010; Jones 2011; Kim 2005). Notably, South Korea shows higher participation rates for children aged 0-2 in formal childcare and pre-school services than other East Asian countries, such as Japan or Taiwan⁸. According to the OECD

⁸ In Taiwan, the main type of childcare arrangement is informal care. Approximately 66% of married Taiwanese women aged 15-64 years take care of their children by themselves, and 26% of married Taiwanese women rely on their relatives' help (Source: eng.stat.gov.tw/public/Attachment/762514403371.xls).

Family Database (2015), in Japan, participation rates for children aged 0-2 in formal childcare and pre-school services increased by just under 4 percentage points, from 22.5% in 2006 to 25.9% in 2013.⁹ In contrast, the participation rates in South Korea increased by 23.2 percentage points, from 10.9% to 34.1%, showing the largest increase among OECD countries between 2006 and 2013. However, this percentage is still much lower than social democratic countries in Europe with supportive family policies, such as Denmark (67%) or Norway (54.3%).

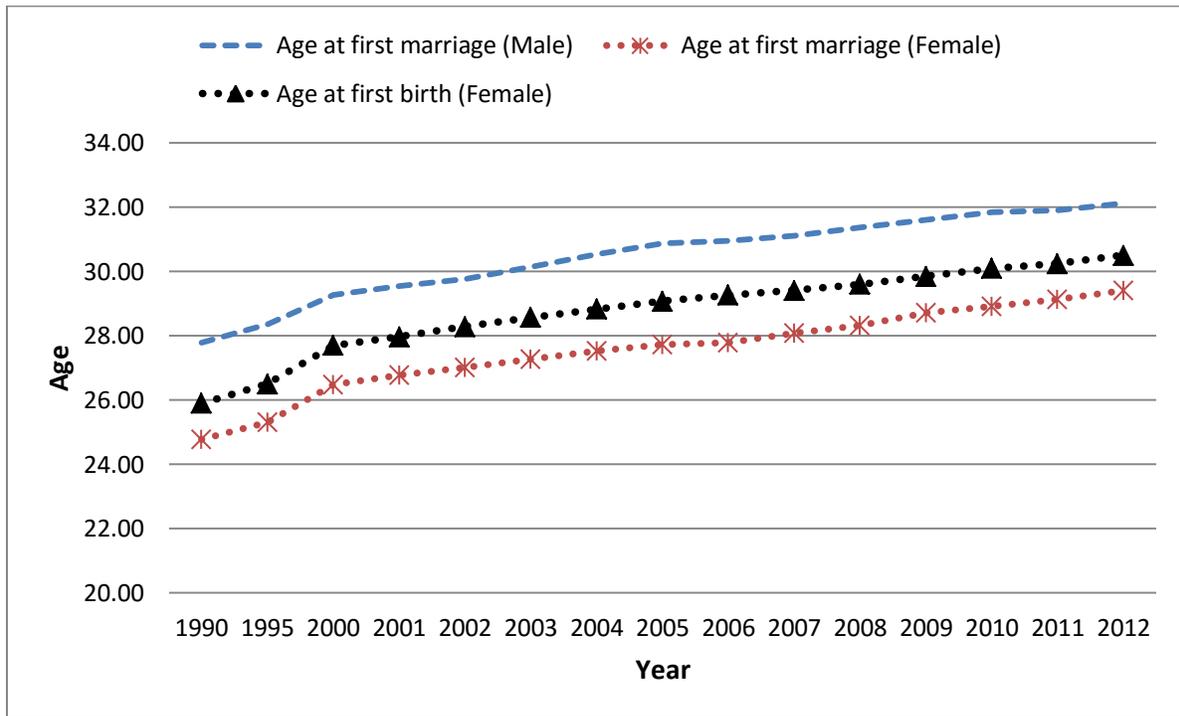
While the M-shaped curve in female labor force participation indicates the difficulty for women of staying in the labor force due to the incompatibility between work and family, there is an apparent glass ceiling for women in the labor market. When compared with other OECD countries, South Korea shows the highest gender wage gap (37.5%) among full-time employees. This gender wage gap is even 1.37 times higher than that of Japan, a country indicating one of the highest gender wage gaps among OECD countries (UNDP 2011). As such, gender equality in South Korea is very low, ranking 117th out of 142 countries, based on the Global Gender Gap Index levels across 2006-2010 (World Economic Forum, 2010).¹⁰

The increase in female labor force participation has led to increasing trends in age-at-first-marriage. This trend is crucial for determining the fertility rate in South Korea, where marriage is a strongly held social norm for childbearing (Eun 2003; 2007). Figure 4 demonstrates that the age-at-first-marriage for both males and females gradually increased between 1990 and 2012, from 27.8 to 32.1 for males and from 24.8 to 29.4 for females, respectively (KOSIS 2015). As the age-at-first marriage has continuously increased, the percentage of people in each gender and age group who have been married at least once has also changed.

⁹ Formal services generally include center-based services, organized daycare and pre-school (both public and private) and professional childminders; while they exclude informal services provided by relatives, friends, or neighbors (OECD Family Database 2015).

¹⁰ In comparison, China ranked at 87th, and Japan ranked at 104th.

Figure 4 Trend in indicators of marriage and fertility in South Korea, 1990-2012

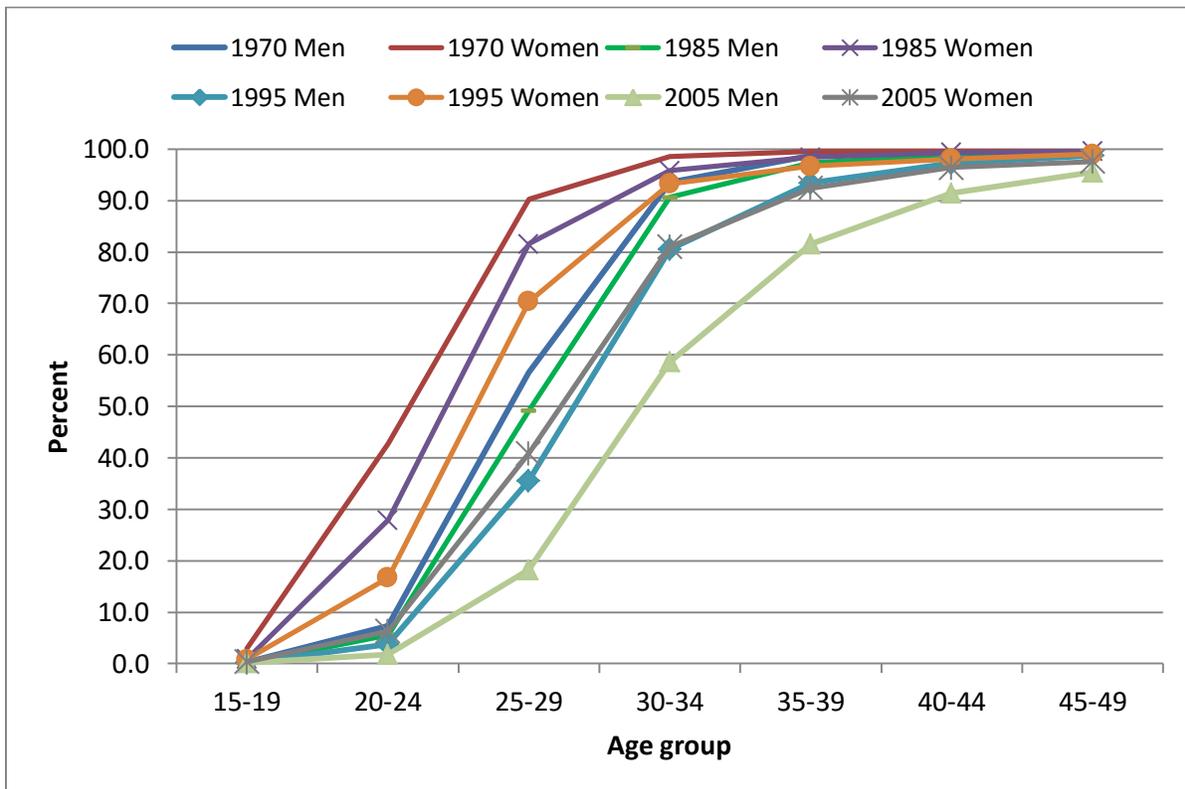


Source: Korean Statistical Information Service

Figure 5 presents the percentage of ever-married men and women, sorted by age group, as it changed over time from 1970 to 2005. The percentage of ever-married women aged 25-29 substantially decreased from 90% in 1970 to 41% in 2005. As discussed above, the main contributing factor in the decrease of marriage in this age group is the expansion of education and female labor force participation. The percentage for women aged 30-34 also decreased from 99% in 1970 to 81% in 2005, but the level of decrease was not as sharp as for women in this age group. By age 44, almost all women had been married at least once during the presented years. In 2005, the year with the lowest percentage of ever-married women, the percentage was still 96%. Compared with other East Asian low-fertility countries, with the exception of China, South Korea shows the lowest proportion of women aged 40-44 who have never been married (UNDP

2012). A similar pattern is observed among men, but the trend in postponement of marriage is clearer for them than it is for women. By 2005, the percentage of ever-married men aged 25-29 had decreased from 57% (in 1970) to a mere 18%. Meanwhile, in 2005, the percentage of ever-married men aged 30-34 remained at 59% – down from 93% in 1970. By age 44, 92% of men have been married at least once, a percentage that is lower than that of women in the same age bracket.

Figure 5 Percentage of ever-married men and women by age group, 1970-2005



Source: Korean Statistical Information Service

Culturally, Koreans are expected to have at least one child soon after marriage, as in the case of the Japanese “marriage package” (Bumpass, Rindfuss, Choe, and Tsuya 2009). Birth

intervals are relatively short. As Figure 4 indicates, the difference in age at marriage and at the birth of the first child has been no more than 1.5 years throughout the measured periods. The spacing between first and second births has not exceeded three years since 2002, and presently the average interval between first and second births is 1.9 years (Statistics Korea 2013). The length of transition between having the first child and having a second child is critical because parents must consider whether they are willing and able to invest the time, effort, and money for the education and care of a second child.

Low fertility and (related) population ageing are high-priority issues for the government, along with strengthening the role of the Ministry of Gender Equality and Family to develop and implement policies for gender equality, prompting the establishment of the Saeromaji Plan in 2006.¹¹ South Korea gives working mothers the right to 12.9 weeks (90 days) of maternity leave, and the first 60 days of maternity leave are paid. Parental childcare leave has been gradually extended from working parents of a child under the age of 1 in 1995 to working parents of a child under the age of 3 in 2007, to working parents of a child under the age of 6 in 2010 and to working parents of a child under the age of 8 in 2012. The income-replacement rate is 40% with a maximum of 1,000,000 Korean Won (approximately \$850 USD). South Korea spends approximately 1% of GDP for public spending on family benefits (OECD, 2013). Table 1 provides information on the current parental leave policies and public spending on family benefits in selected countries. Although both working mother and fathers have had the right to 12-month childcare leave since 1995, few fathers take childcare leave. The proportion of male workers taking childcare leave was less than 5% of all workers taking childcare leave in 2014 (Statistics Korea 2015).

¹¹ Saeromaji plan is a policy initiative established during the Lee Myung-Bak administration to address income polarization. Areas of focus include employment, education, childcare, and welfare (Government of Korea 2006).

And yet, public spending on family benefits in South Korea is a mere 1% of the GDP, the lowest among 33 OECD countries (OECD 2013). Public spending on family benefits refers to financial support for families and children including child-related cash transfers to families with children, public spending on services for families with children, and financial support for families provided through the tax system (OECD 2012). On average, OECD countries spend 2.6% of their GDP on family benefits, with substantial variations across countries. Public spending in this area for South Korea is a mere 1% of the GDP, which is the lowest among 33 OECD countries. Nordic European countries have the highest public spending on family benefits, near 4% of the GDP.

Table 1 Public support for families in selected countries

	Total paid leave for mothers ¹⁾²⁾	Average payment rate ³⁾ (%)	Paid leave reserved for fathers ¹⁾	Average payment rate ³⁾ (%)	Public spending on family benefits ³⁾
Italy	47.7	52.7	0.2	100	2.01
Japan	58.0	61.6	52.0	58.4	1.74
Norway	87	42	14.0	90.8	3.20
Sweden	60	63.4	10.0	75.6	3.64
South Korea	64.9	40.1	52.6	31.0	1.16
OECD average	53.7	59.2	9.0	65.1	2.55

¹⁾ Figures refer to the entitled weeks of paid leave as of April 2014.

²⁾ Total paid leave for mothers includes maternity leave and parental and home care leave available to mothers.

³⁾ The average payment rate is the proportion of gross earnings replaced by the benefits over the length of the paid leave for a person with average earnings.

³⁾ Public spending on family benefits refers to financial support for families and children, including child-related cash transfers to families with children, public spending on services for families with children, and financial support for families as provided through the tax system. Presented in percent of GDP, 2011.

Source: Social Expenditure Database preliminary data (www.oecd.org/social/expenditure.htm), September 2014

In brief, South Korea has yet to successfully develop gender equitable institutional supports to lessen the conflict between work and family roles. It appears that the rising cost of

living, increasing investments needed for children, women's roles as the main caregivers in their households, and the lack of institutional support for children and family create difficulties in balancing the demands of work and family. This incompatibility between work and family is one of the key elements explaining very low fertility rates with low female labor force participation at the national level. South Korea might be one of the countries in this category. This positionality of the case of South Korea in the literature leads to my core research question: How can the theoretical link between gender equity and fertility be expanded to highlight the importance of gender equity in understanding fertility variations within a country?

South Korea is an excellent case study for expanding our understanding of the relationship between gender equity and fertility. Evidence suggests that gender equity positively affects fertility aspirations and behaviors, especially in countries with low gender equity regimes. However, studies emphasizing the effects on fertility of overwhelming role conflicts among South Korean women have yet to identify the best measures of gender equity, instead relying upon the gender division of household labor alone. More systematic research examining gender equity and fertility in South Korea could broaden our understanding of the relationship between gender equity and fertility because the institutional and cultural backgrounds for gender equity in both public and private spheres in South Korea are substantially different from those in Europe or North America. Moreover, understanding of the relatively recent shift to the persistent very low fertility rate in South Korea (often also referred to as lowest-low fertility) requires further investigation, given that the two-child family ideal persists among South Korean men and women. There is a substantial gulf between the two-child family ideal and the actual fertility rate. If low fertility in South Korea is not yet solidly institutionalized (given the relatively recent shift

to lowest-low fertility and the persistence of a two-child family ideal), there may be a possibility of exiting the lowest-low fertility category.

RESEARCH QUESTIONS

In order to integrate the case of South Korea as a critical case for theoretical understanding of the impact of gender equity, I focus on three sets of related research questions. In the first set of questions I ask whether family supportive environments for egalitarian gender relations matter with regard to fertility in South Korea, and I also look at sources of family supportive environments and how they work in increasing fertility. These questions form the basis for Chapter 2. In Chapter 3, I examine whether perceptions of gender equity within the family influence the realization of fertility desires within the context of institutional gender inequality, whether indications of higher gender equity in the family always have a positive impact on the realization of fertility intentions in low fertility countries, and whether this is true even in countries experiencing a relatively recent transition to low fertility and low gender equity regimes. Finally, in Chapter 4, I ask whether gender equity in the family affects marital quality, how they work for each other, and whether marital quality positively affects fertility.

PLAN OF THE RESEARCH

Data

To answer my research questions, I use three waves of data from the Korean Longitudinal Survey of Women & Families. The Korean Longitudinal Survey of Women & Families (KLoWF) is an ongoing data collection effort of the Korean Women's Development Institute. Initiated in 2007 (Wave 1), with publically available data for Wave 2 (2008) and Wave 3 (2010), the

KLoWF provides data uniquely suited to the empirical testing of the associations between gender equity, family, and fertility history. The KLoWF offers an exceptional opportunity to follow women's experiences, family contexts, and attitudinal changes over time, with detailed information regarding family type, family relationships, attitudes toward gender roles, and family values.

Based on multi-stage stratified sampling, a total of 9,068 households, containing 9,997 women between the ages of 19 and 64, were surveyed in Wave 1. A total of 7,031 respondents participated in all three waves of the study currently available. Questions concerning fertility intentions are limited to currently married women, younger than 45, with at least one birth experience. Within this group, I further restrict my analyses to married mothers of parity 1, under the age of 40, who responded to fertility intentions at Wave 1. I then trace fertility-related responses for this sub-sample across Wave 2 and Wave 3 with all valid responses for multivariate models for each substantive chapter. Calculations are adjusted for the PSU, and individual weights are employed in the bivariate and multivariate analyses.

The longitudinal nature of these data allows me to examine individual changes associated with key life transitions (i.e., transitions to a second birth) over the course of a three-year period. Three years is not enough to fully examine the realization of all desired second births, but it provides a sufficient number of years given the short intervals between first and second births.

Chapter outline

Guided by the literature discussed in this chapter, I present the empirical findings of the analysis in Chapters 2 through 4. In Chapter 2, I address intriguing questions about the role of institutional support in shaping individual fertility attitudes and behavior in South Korea.

Previous studies examining transnational comparison of fertility suggests that countries with weak institutional support for work-family balance indicate very low fertility. Building on this literature I ask whether, in a context with weak institutional support as well as very low fertility (such as South Korea), institutional support fails to positively influence individual fertility. What are other sources of family supportive environments, and do they work for fertility? I use logistic regression models to test associations between three sources of family supportive environments and women's fertility intentions and fertility behavior concerning a second child. In Chapter 3, I address more specifically the influence of gender equity in the family on the realization of fertility intentions. I integrate an additional aspect of gender equity in the family suited in the specific context of high educational aspirations, into the conventional approach to household-level gender equity. I then use logistic regression models to test the impact of gender equity in the family on the realization of fertility intentions for a second child. In Chapter 4, I explore issues of relationship between gender equity and marital quality. Marital experience is highly dependent on gender relations within the marriage, and it can further affect fertility decision-making. I use ordinary least squares (OLS) regression models and logistic regression models to test these relationships.

The concluding chapter (Chapter 5) provides a final summary of the research findings and an evaluation of their contributions to theories of low fertility. I summarize the main findings, focusing on core research questions that I addressed in the introduction chapter. These findings contribute to theories of low fertility by linking potential sources of family supportive environments given the weak institutional support for family balance. Furthermore, the findings shed light on theories of low fertility by highlighting the importance of increased male participation in housework and childcare as well as educational responsibilities for children for

higher marital quality and for couples' reproductive goals. I conclude by suggesting future areas for research and policy implications.

CHAPTER 2

THE INFLUENCE OF SUPPORTIVE ENVIRONMENTS FOR FAMILY ON WOMEN'S FERTILITY INTENTIONS AND BEHAVIOR¹²

INTRODUCTION

There is a great deal of heterogeneity in fertility levels across advanced countries, as scholars have observed an upturn in total fertility rates in Western countries in the past decade (Goldstein, Sobotka, and Jasilioniece 2009; Myrskylä, Kohler, and Billari 2009). In addition, the relationship between trends in female labor force participation and fertility trends has changed from negative to positive at the national level in the 1990s (e.g., Brewster and Rindfuss 2000; Del Boca 2002; Morgan 2003; Rindfuss et al. 2007). However, East Asian countries, such as South Korea (hereafter Korea) and Japan, continue to be exceptions to this recent rebound in fertility levels. Scholars suggest that both the upturn in Western countries and the consistent, very low fertility in East Asia relate to the compatibility between parenthood and labor force participation (Mills et al. 2011; Myrskylä, Kohler, and Billari 2011). A great deal of research examining the relationship between fertility and family emphasizes the role of institutions, through such means as family policies, to achieve egalitarian gender roles and relations, enabling women to balance work and family (e.g., Esping-Andersen and Billari 2015; Gauthier 2007; Thévenon 2011).

In a comparative study, Thévenon (2011) examines the cross-national variation in state support to families, using data from the OECD family database. His analysis reveals that state support to families in Southern European countries, Japan, and Korea are characterized by a deficit of policies enabling the work and family balance. Korea is even markedly different from the countries in the same group with similar levels of state support to families, indicating that it

¹² A revised version of this chapter appears in *Demographic Research*.

“clearly lag[s] behind the other OECD countries, whichever type of support is considered” (Thévenon 2011:64).

Since some countries do not provide strong state support to families due to their institutional regimes, individuals may require support from other sources, including male partners or family networks (Balbo and Mills 2011). Literature linking gender equity and fertility at the micro level highlights that male partners’ participation in housework and childcare positively affects women’s fertility intentions, especially within low gender equity institutional contexts (Mills et al. 2008; Olàh 2003). Scholars have recently explored the effect of support from grandparental childcare on fertility as a potential source of supportive environments to improve the compatibility between work and family (Hank and Buber 2009; Thomese and Liefbroer 2013). However, previous studies often investigated a single source of supportive environments for family: the state, male partners, or extended family and its impact on fertility (Harknett, Billari, and Medalia 2014).

Given this background, the goal of this chapter is to fill in the gap in the literature by examining the influence of three sources of supportive environments for family on women’s intended and actual fertility behavior for a second child. I situate the Korean case in broader discussions on the nuanced relationships between access to family support and fertility within a context lacking institutional support for childrearing embedded in low levels of gender equality. Using data from the three waves of the Korean Longitudinal Survey of Women & Families from 2007 to 2010, I examine whether supportive environments for family, including institutions, male partners’ participation in housework and childcare, and grandparental childcare assistance, influence fertility intentions and fertility behavior for married women with one child. My analysis focuses on second births, given the cultural context of the rapid transition to first birth

within the first years of marriage in Korea as I discussed in Chapter 1. Moreover, it enables me to examine the impact of existing childcare support from three sources of supportive environments for family for second births (Thomese and Liefbroer 2013).

I begin with discussing previous studies on this topic in order to draw hypotheses focusing on a deeper understanding of the process that links the family supportive environments with fertility intentions and behavior. I then introduce my analytic sample, measures, and methods used in this chapter. Starting with a descriptive analysis of the sample, I conduct a set of logistic regression analyses of women's fertility intentions and fertility behavior for a second child. I conclude with a reflection on my findings.

PREVIOUS STUDIES & HYPOTHESES

Changing female gender roles, support from institutions, and fertility

As I reviewed in Chapter 1, studies on low fertility during the past decade have emphasized the incompatibility of the roles of mothers and workers as an explanation of the national emergence of low fertility and have viewed it as a major obstacle to fertility recovery. Several scholars explain this evidence by emphasizing the role of social institutions (i.e., family policy regimes) providing support to the family, enabling compatibility between work and family, reflecting new expectations towards gender-egalitarian family norms for pro-family outcomes, such as achieving the desired number of children (Chésnais 1996; McDonald 2000, 2013; Thévenon 2011).

State family policies, including cash benefits or childcare arrangements, can reduce the conflict between work and family for women, and their effects on fertility vary by country. In her review of the literature linking policies and fertility, Gauthier (2007) suggests mixed findings

about the impact of policies on fertility. Importantly, however, her review reveals that evidence based on the micro-level data support for a small positive impact of policies on fertility and those impacts are varying by country and parity. Moreover, the impact of institutional childcare arrangements tends to be lower without changes in gender equality or changes in other factors influencing achieving women' desired family size, such as support from husbands (McDonald 2002; Rindfuss et al. 2010).

As I briefly discussed in Chapter 1, public support of families in Korea, and East Asia more broadly, is limited based on cross-national analyses of those in other OECD countries (Thévenon 2011). Likewise, McDonald (2008) argues that very low fertility across East Asia indicates failing social models in East Asia based on traditional models of family receiving little or no assistance from the state. Yet, it is not clear whether social policies have an impact on variations in fertility within a country with limited state support. Do social policies have positive impact on individual fertility in Korea as they do in the Scandinavia countries? Or do they have no significant impact on individual fertility? Specifically, do they significantly impact on fertility intentions and/or behavior? These remaining questions lead me to posit my first set of hypotheses.

Hypothesis 1a: Support from institutions has a positive effect on women's fertility intentions for second children.

Hypothesis 1b: Support from institutions has a positive effect on women's giving birth to second children.

Support from husbands and fertility

Childbearing can seriously limit women's labor market opportunities unless women have access to supportive environments for childbearing and childrearing. Family sociologists linking low fertility to the role conflict between mothers and workers focus on the importance of support from husbands in terms of housework or childcare (e.g., Goldscheider et al. 2013, 2015; Torr and Short 2004). Empirical studies building upon the gender equity theory at the micro level suggest that greater gender equity in the family, reflected in support from husbands in terms of housework or childcare, positively influences women's fertility attitudes or behavior (e.g., Cooke 2009; Mills et al. 2008; Olàh 2003; Tazi-Preve, Bichlbauer, and Goujon 2004; Neyer, Lappegård, and Vignoli 2013; Torr and Short 2004).

Olàh (2003) supports a positive influence of more equal sharing of housework and childcare on the likelihood of fertility intentions for second children in Hungary. Likewise, Mills et al. (2008) find that Italian women doing more than 75% of the housework tend to have lower fertility intentions for second children among women with one child. Tazi-Preve, Bichlbauer, and Goujon (2004) provide interesting evidence from Austria that men sharing household duties (egalitarian partnerships) are more likely to intend to have a(nother) child than men living in traditional partnerships. Evidence based on the data from the United States (Torr and Short 2004) and from Italy (Cooke 2009) support the positive influence of more equal division of housework on the transition to a second birth. These results provide strong support for the positive impact of gender equity in the family on fertility intentions and outcomes. Also, many of these studies, with the exception of those in the United States, are characterized by relatively low female labor force participation and very low fertility, with limited public support of families. Since public support of families is weak and limited (e.g., a lack of childcare support), support from male

partners may have a strong positive impact on fertility. This leads me to develop my second set of hypotheses.

H2a: Support from husbands in terms of housework and childcare has a positive effect on women's fertility intentions for second children.

H2b: Support from husbands in terms of housework and childcare has a positive effect on women's giving birth to second children.

Supports from grandparents and fertility

In a country with limited public support of families, greater gender equality in the family is necessary through increased male involvement in the home to improve the compatibility between roles for work and family. Additionally, people generally have low levels of trust toward non-familial institutions in contexts where there is weak state support to families and strong familialism (Esping-Andersen and Billari 2015). What other sources of support for families can people utilize from their networks? While studies of low fertility emphasize institutional interventions and a more equal division of household labor for better fertility outcomes, they pay relatively less attention to the role of grandparents. Parents' need for childcare depends on the institutional context, such as the availability of formal childcare (Balbo and Mills 2011; Hank and Kreyenfeld 2003; Philipov et al. 2006). When the state and other relevant social institutions do not provide appropriate support for people in need, and especially when those non-familial institutions receive very low levels of trust, parents need to seek other sources of childcare support or purchase it.

Bengtson (2001:6) emphasizes the increasing importance of multigenerational bonds for individual well-being and support over the life course given the longer years of "shared lives"

between generations, emphasizing the role of grandparents in contemporary families, including raising grandchildren. Evidence suggests that grandparents' involvement in childcare has doubled over the last decade in Taiwan (Tsai et al. 2011). Grandparents' childcare support helps parents to combine their roles in work and the family (Hoppmann and Klumb 2010). Recent fertility studies concerning the family network as a source of childcare support point to the impact of childcare support from extended family on fertility intentions or outcomes (e.g., Balbo and Mills 2011; Bühler and Philipov 2005; Tanskanen and Rotkirch 2014).

Evidence from Continental and Eastern Europe emphasizes the positive impact of support from extended family on fertility intentions. Using Bulgarian data, Bühler and Philipov (2005) find that the availability of substantive resources from the extended family and more reciprocal relationships with family members increases the likelihood of fertility intentions for second children. Similarly, Hank and Kreyenfeld (2003) find that childcare support from grandparents increases the likelihood of having a first child in Germany, although their measure was rather indirect, focusing on the geographic proximity of grandparents. Bühler and Frątczak (2007) also suggest that the more respondents receive monetary or non-monetary support from personal networks, the more likely they are to intend to have second children in Poland. Using data from the Netherlands, Thomése and her colleagues find that grandparental childcare increases the likelihood of additional childbirths and they view grandparental childcare as an emerging reproductive strategy (Kaptijn et al. 2010; Thomése and Liefbroer 2013).

Based on a cross-national comparison of grandparental childcare in 10 countries in Continental Europe, Hank and Buber (2009) address an important point that variations in the prevalence and intensity of childcare support from grandparents correspond to the family policy regimes. How does the impact of support from grandparents on women's fertility attitudes and

behaviors play out differently in a context with weak support from the state and from husbands? Chu, Kim, and Tsay (2014) find a positive relationship between living with in-laws and the timing of first births within marriage in Taiwan. Co-residence with parents or in-laws may provide a higher probability of receiving childcare support from them, but this leaves open the question of how the actual support transfers between generations. In addition, a limitation of previous studies is that they gave no consideration to other sources of support to families when they examined the influence of childcare support from grandparents.¹³ Would childcare support from grandparents increase women's fertility intentions and behaviors for second children, even controlling for other sources of family support? This led to my third set of hypotheses:

H3a: Support from grandparents has a positive effect on women's fertility intentions for second children.

H3b: Support from grandparents has a positive effect on women's giving birth to second children.

DATA AND METHODS

Sample

Among a total of 7,031 females responded to all three waves of the survey, I first excluded 3,611 women aged 41 or above in 2007. I then further limited my sample to married women, excluding 629 women who had never married and 78 separated, divorced, or widowed women. Then I excluded 1,938 women who had two or more children in Wave 1, 177 women who did not indicate the number of children they had given birth to, and 7 women who did not respond to the question about fertility intentions. My sample-selection process resulted in 591 married women

¹³ Exceptions include Balbo and Mills (2011), which includes partners' support, and Thomése and Liefbroer (2013), which controls for the use of formal childcare.

with one child. Finally, I excluded 66 cases because of missing values for husbands' income (n=58), for elderly care because of old age or illness (n=6), and the hours that husbands spent on housework and childcare (n=2). The final analytic sample therefore includes 526 women with valid responses for all model covariates. I adjusted model estimations for individual weights in an attempt to reduce the potential issues of sample selection.

Dependent variables: Fertility intentions and fertility behavior

My dependent variables are fertility intentions for second children in 2007 and actual births in the following three years. I measured fertility intentions based on women's responses to a question in Wave 1 that asked if respondents planned to have another child in the future, with three possible options, *yes*, *no*, and *don't know*. I classified the responses into dichotomous categories. Responses of *yes* are coded 1 and responses of *no* or *don't know* are coded 0. About half of my sample (52.8%) expressed their intention to have a second child as presented in Table 2. The total expected number of children (including their current child) of these women is 1.35 children.¹⁴ Fertility intentions serve as an independent variable for estimating fertility behavior. I used the responses to a question collected in Wave 2 or Wave 3 that asked, "Have you given birth to a child since the last interview?" to determine if a mother had a second child between 2007 and 2010.¹⁵ The fertility behavior is also a dichotomous variable that differentiates *had a second child* (1) from *did not have a second child* (0).

Independent variables: Supportive environments for family

¹⁴ The exact survey wording is as follows: "Considering your current life and future plan, how many children do you plan to have in total?"

¹⁵ The interval between Wave 1 and Wave 2 was 12 months; the interval between Wave 2 and Wave 3 was 24 months.

Supportive environments for family are classified into three aspects based on responses from Wave 1: supports from institutions, husbands, or grandparents. Demographers have used information on knowledge and attitudes to suggest implications for population policy (e.g., Knowledge, Attitudes, and Practices of Contraception studies). The assumption of using this approach was that improving knowledge about and access to family planning (contraceptive methods) can help women prevent unwanted pregnancies (Westoff 1988). I adopt this approach to examine whether or not knowledge about pro-natal family policy programs positively influences fertility intentions or fertility behavior (H1a and H1b). I hypothesize that women with more knowledge of family policy are more likely to have positive fertility intentions and have second children compared with women with little or no knowledge about this policy. I measured *support from the institutions* using respondents' knowledge about childcare leave reserved for use by fathers.¹⁶ I used responses to a question that asked "Have you ever heard about childcare policy such as childcare leave for use by fathers?" Responses ranged from *never heard of it* and *heard of it but don't know it well* to *heard of it and know it very well*. I used *never heard of it* as a reference category.

Support from the husband is based on women's responses about their husbands' participation in housework and childcare hours per day. Overall, the amount of time men devote to household tasks is quite low (mean = 1.18 hours, s.d. = .08).¹⁷ I coded support from husbands (i.e., wives' reports of husbands' time spent doing housework and childcare per day) into quartiles to test the fertility impact of support from the husbands (H2a and H2b). I used the

¹⁶ I chose the childcare availability for fathers instead of that of mothers since the M-shaped FLEP in Korea. Less than 30% of my sample was employed by the time of their initial interview in Wave 1. It is possible that a substantial proportion of women had already dropped out of the labor force after being married.

¹⁷ For my sample, the average time spent on household labor by husbands was 1.18 hours. Thus, relative sharing of hours spent on housework and childcare between couples does not provide enough variation to test its effect on fertility.

lowest quartile¹⁸ (< 25%) of support from the husbands as the reference category. By utilizing quartiles, I can capture the threshold effects of husbands' time devoted to housework and childcare.

I constructed a categorical measure of *support from grandparents*¹⁹ that combines childcare support from parents or in-laws and multigenerational co-residence. The components are based on two questions that ask about childcare support from grandparents: "Does your father or mother look after your child for an hour or longer per week?" and "Does your father-in-law or mother-in-law look after your child for an hour or longer per week?" I also used two questions that asked about the co-residence with parents or in-laws: "Does your father or mother live with you or your sibling?" and "Does your father-in-law or mother-in-law live with you or your husband's sibling?" First, I dichotomized the response by classifying whether or not respondents' parents or in-laws live with the respondent. I then constructed a categorical variable by combining the childcare availability and co-residence with parents or in-laws: *co-residence with grandparents providing childcare*, *co-residence with grandparents not providing childcare*, *no co-residence with grandparents providing childcare*, and *no co-residence with grandparents not providing childcare*.

Control Variables

Guided by the literature, I included several demographic and socioeconomic variables, including respondents' age, education, and employment, husbands' income, and time since first birth. I used respondents aged less than 30 at Wave 1 as the reference category, and compared them with

¹⁸ The quartiles of a ranked set of data are the four subsets (equal groups) whose boundaries are the three quartile points. Each group includes approximately a quarter of data. For instance, the first quartile group includes the lowest 25% of the data.

¹⁹ Grandparents include both paternal and maternal grandparents.

women aged between 30 and 34, and women aged 35 or older. Slightly more than one third of respondents were less than 30 years old at Wave 1, another slightly more than one third of the respondents were between 30 and 34 years, and 28% were 35 or older. I compared highly educated women with college degrees with women who have a high-school diploma or less. I compared employed women with unemployed women. I compared women whose husbands' monthly incomes fall in the highest quartile with those whose husbands' incomes are the remaining three quartiles. A mean monthly husbands' income for the highest quartile is 4,731,000 Korean Won (approximately US\$3,900). To control for place of residence, women who reside in urban areas (95%, reference category) were compared with respondents who reside in rural areas. To control for age-related capacities²⁰ or illness of grandparents that may affect the availability of grandparental childcare support, I controlled for grandparents' health status based on the following two questions: "Is your father or mother old or ill to the extent that he or she needs a caregiver?" and "Is your father-in-law or mother-in-law old or ill to the extent that he or she needs a caregiver?" Respondents could answer yes or no. I constructed a dichotomous variable to compare respondents with old or ill parents or in-laws with respondents who did not have old or ill parents or parents-in-law.

²⁰ Grandparents' labor force participation is also likely to influence the availability of grandparental childcare support. Due to the unavailability of this information, I could not control for this factor. In general, however, the labor force participation among elderly population is relatively low, especially among female. Labor force participation rates for women aged 60 or above stay approximately 30% since 2000.

Table 2 Descriptive statistics of sample characteristics for married Korean women aged 40 or younger at Wave 1, KLoWF 2007 (N = 526)

Variable	Percentage	Mean	S.D.
Had a birth (Wave 2 ~ Wave 3)	40.7		
Wave 1 (2007)			
Fertility intentions (yes)	52.8		
Age			
Less than 30	36.46		
30-34	36.24		
35-40	27.30		
Employment (employed)	25.61		
Education (college degree or above)	34.15		
Mean husband's monthly income quartiles ¹⁾			
Lowest quartile	24.10	147.19	2.69
2nd quartile	21.86	201.49	0.50
3rd quartile	31.78	272.15	2.36
Highest quartile	22.25	473.10	17.98
Rural residence	5.60		
Caregiving needs for parents or in-laws due to old age or illness (yes)	5.67		
Support from institutions (childcare leave for use by fathers)			
Never heard of it	17.70		
Heard of it, but don't know it well	53.29		
Heard of it, and know it well	29.00		
Support from husband for housework and childcare (quartiles based on participation hours per day)			
Lowest quartile	26.98	0.04	0.01
2nd quartile	33.49	0.48	0.01
3rd quartile	14.53	1.05	0.02
Highest quartile	25.00	3.42	0.19
Support from parents or in-laws (childcare assistance)			
No coresidence with parents or in-laws not providing childcare	73.48		
No coresidence with parents or in-laws providing childcare	15.62		
Coresidence with parents or in-laws not providing childcare	2.91		
Coresidence with parents or in-laws providing childcare	7.99		

Note: ¹⁾ Unit for mean and standard deviation: 10,000 Korean won (approximately equal to US\$8.50)

Methodological approach

I used binary logistic regression models in order to test all hypotheses regarding my two dichotomous dependent variables: fertility intentions for second children at Wave 1 and a birth of a second child occurring between Wave 1 and Wave 3, during the period of three years. For each of the variables concerning supportive environments for family, I created dummy variables based on responses collected from Wave 1. For my analysis of actual fertility, I took into account the influence of fertility intentions at the initial interview, since fertility intention is likely to be a predictor of an actual childbirth.

RESULTS

Supportive environments for family and fertility intentions

Table 3 presents logistic regression results for a series of nested models examining the relationship between supportive environments for family and fertility intentions among married women with one child. Model 1 incorporates control variables. Model 2 explores the importance of adding variables measuring family supportive environments.

Model 1 presents a clear and strong impact of age-related demographic factors, in line with the expected directions based on the previous literature. The effects of these variables stay significant across models. Women aged 35 or older are less likely to intend to have second children than women aged less than 30. Time since first birth also has a strong effect on women's fertility intentions. Women who gave birth to their first children more than five years earlier are significantly less likely to intend to have second children, compared to women who gave birth to their first children two or less years earlier. These women may be more likely to remain at parity 1 given the national short birth spacing intervals between first and second births.

Other socioeconomic control factors, including employment, education, husbands' monthly income, and having old or ill parents or in-laws, have no significant impact on women's fertility intentions for a second child.

In Model 2, I tested the implications of adding variables indicating that three sources of supportive environments for family positively influence women's fertility intentions for second children. Overall, results indicate that support from institutions, husbands, or grandparents has no significant impact on women's fertility intentions. Women more knowledgeable and familiar with childcare policy reserved for exclusive use by fathers are more likely to have fertility intentions for second children, although the result is not statistically significant. Likewise, women whose husbands spend more time on housework and childcare are more likely to intend to have second children than women whose husbands spend the least amount of time on housework and childcare. However, this relationship is not significant. Support from grandparents, based on coresidence with parents or in-laws and the availability of childcare support from them, also has no significant impact on the likelihood of fertility intentions for second children. Women who do not live with parents or in-laws who provide childcare support are only slightly more likely to intend to have second children than women who do not live with parents or in-laws who do not provide childcare support, and this finding is not statistically significant. These findings do not support my hypotheses regarding the positive impact of supportive environments for family on fertility intentions. These findings do not support my hypotheses concerning the positive impact of supportive environments for family on fertility intentions for second children (H1a, H2a, and H3a).

Table 3 Logistic regression predicting patterns of fertility intentions for married Korean women aged 40 or younger with parity 1 at Wave 1, KLoWF 2007-2010 (N = 526)

Variable	Model 1			Model 2		
	Coef.	S.E.	Odds ratio	Coef.	S.E.	Odds ratio
Age						
Less than 30	-	-	1.00	-	-	1.00
30-34	-.21	.27	.81	-.23	.28	.80
35-40	-1.11	.35	.33**	-1.04	.35	.35**
Employment (employed)	-.08	.29	.93	-.21	.30	.81
Education (college degree or above)	.12	.26	1.13	.06	.26	1.06
Highest quartile of the husband's monthly income	.03	.29	1.04	.05	.30	1.05
Time since first birth						
Less than two years	-	-	1.00	-	-	1.00
Two years to five years	-.23	.25	.80	-.28	.25	.76
More than five years	-1.44	.37	.24***	-1.45	.38	.23***
Caregiving needs for parents or in-laws due to old age or illness (yes)	-.53	.43	.59	-.48	.42	.62
Childcare leave for use by fathers						
Never heard of it				-	-	1.00
Heard of it, but don't know it well				.36	.29	1.43
Heard of it, and know it well				.27	.33	1.31
Support from husband for housework and childcare						
Lowest quartile				-	-	1.00
2nd quartile				.36	.29	1.43
3rd quartile				.26	.35	1.30
Highest quartile				.18	.34	1.33
Support from grandparents						
No co-residence with parents or in-laws not providing childcare				-	-	1.00
No co-residence with parents or in-laws providing childcare				.29	.38	1.33
Co-residence with parents or in-laws not providing childcare				.13	.60	1.14
Co-residence with parents or in-laws providing childcare				-.60	.42	.55
Constant	.85***	.25		.43	.38	
McFadden's Adjusted R^2		0.126			0.138	
Wald test for improvement of model fit		-			2.09	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. S.E. denotes standard error.

Supportive environments for family and fertility behavior

Table 4 indicates the logistic regression results for a series of nested models of fertility behavior. I estimated fertility behavior models following the same procedure for the fertility intentions model. Model 1 shows that control variables generally have significant influences on women's second births. As with the fertility intentions model, women aged between 30 and 34 and those aged 35 or above are significantly less likely to have second children than women aged less than 30. Highly educated women are less likely to have second children than less educated women ($p < .10$). Employed women are less likely to have second children than unemployed women, when controlling for other variables (see Model 2). Women who gave birth to their first children between two and five years ago are more likely to have second children than women whose time since first birth is less than two years ($p < .10$). In addition, women with old or ill parents or in-laws are less likely to have second births, net of other factors. As expected, fertility intentions at Wave 1 are a very strong predictor of actual fertility in the following three years. Women who intended to have second children at Wave 1 were six times more likely to have second children by Wave 3.

Results from Model 2 indicate that supportive environments for family have stronger effects on women's actual fertility. All sources of supportive environments for family significantly affect actual fertility, net of other factors, including fertility intentions. Women who have heard of childcare policy reserved for exclusive use by fathers and know it very well are twice as likely to give birth to second children as women who have never heard of it ($p < .10$). Women who have heard of childcare policy for fathers but do not know it well are slightly more likely to have second children than women who have never heard of it, but this finding is not

significant. These findings partly support my hypothesis (H1b) concerning the positive impact of support from institutions on fertility behavior, but the impact is relatively small.

In contrast to the fertility intentions model, support from husbands regarding housework and childcare affects women's second births. Women whose husbands spend the highest amount of time on housework and childcare are three times more likely to have second children than women whose husbands spend the least amount of time on housework and childcare. Women whose husbands' spent hours on housework and childcare are in either the 2nd or the 3rd quartiles are only slightly more likely to have second children than women whose husbands' spent hours on housework and childcare are in the lowest quartile. But this relationship does not reach statistical significance.

Results suggest that support from grandparents significantly affects the likelihood of second births. Compared to women who do not live with parents or in-laws not providing childcare support, women who do not live with parents or in-laws providing childcare support are 1.6 times more likely to have second children. But this effect is not significant. Women who live with parents or in-laws not providing childcare support are no less likely to have second children than women who do not live with parents or in-laws not providing childcare support. Conversely, women who live with parents or in-laws providing childcare support are 2.5 times more likely to have second children than women do not live with parents or in-laws not providing childcare support. This offers support for H3b, which predicted a positive effect of grandparental childcare on childbirths (H3b).

Adding supportive environments for family variables to the control model for predicting the likelihood of second births significantly improves the model fit (Wald test chi-square = 5.45,

df = 1, p < .02). This suggests that supportive environments for family are significant predictors of the likelihood of second births.

Table 4 Logistic regression predicting patterns of fertility behavior for married Korean women aged 40 or younger with parity 1 at Wave 1, KLoWF 2007-2010 (N = 526)

Variable	Model 1			Model 2		
	Coef.	S.E.	Odds ratio	Coef.	S.E.	Odds ratio
Age						
Less than 30	-	-	1.00	-	-	1.00
30-34	-.59	.29	.55*	-.70	.30	.50*
35-40	-1.36	.40	.26***	-1.42	.40	.24***
Employment (employed)	-.34	.32	.71	-.64	.32	.53*
Education (college degree or above)	-.54	.29	.58 ⁺	-.72	.29	.49*
Highest quartile of the husband's monthly income	.41	.34	1.50	.32	.35	1.38
Time since first birth						
Less than two years	-	-	1.00	-	-	1.00
Two years to five years	.52	.29	1.68 ⁺	.70	.29	2.01*
More than five years	-.70	.42	.50 ⁺	-.23	.44	.79
Caregiving needs for parents or in-laws due to old age or illness (yes)	-1.17	.53	.31*	-1.34	.57	.26*
Fertility intentions in 2007	1.78	.29	5.94***	1.88	.29	6.55***
Childcare leave for use by fathers						
Never heard of it				-	-	1.00
Heard of it, but don't know it well				.16	.38	1.17
Heard of it, and know it well				.80	.43	2.22 ⁺
Support from husband for housework and childcare						
Lowest quartile				-	-	1.00
2nd quartile				.55	.37	1.73
3rd quartile				.24	.45	1.27
Highest quartile				1.10	.38	3.02**
Support from grandparents						
No co-residence with parents or in-laws not providing childcare				-	-	1.00
No co-residence with parents or in-laws providing childcare				.50	.38	1.64
Co-residence with parents or in-laws not providing childcare				-.14	.86	.87
Co-residence with parents or in-laws providing childcare				.92	.40	2.52*
Constant			.47*	-1.74	.52	.18***
McFadden's Adjusted R^2		0.241			0.277	
Wald test for improvement of model fit		-			5.45*	

Note: ⁺ < .10; * p < 0.05; ** p < 0.01; *** p < 0.001. S.E. denotes standard error.

DISCUSSION AND CONCLUSIONS

In this chapter, I examined whether supportive environments for family from three distinctive sources influence women's fertility intentions and actual fertility for second children. Drawing on theories concerning support of families for enabling the work and family balance, I tested the impact of three sources of supportive environments, from institutions, husbands, and grandparents on fertility intentions and fertility behavior.

My findings suggest that supportive environments for the family have more effect on fertility behavior than on fertility intentions. Supportive environments for family increase the likelihood of having second children, controlling for socio-demographic factors and fertility intentions. Support from the institutions, indirectly measured by the knowledge about childcare policy reserved for exclusive use by fathers, indicates a significant impact on the likelihood of having a second child. Women who are very familiar with childcare policy for use by fathers are more likely to have second children than women who do not know about it at all. This finding is in line with the conclusions drawn from Gauthier (2007), suggesting that family policy has a small, positive impact on fertility. Yet, for Koreans, this small, positive impact may be challenging to acquire given the institutional and cultural contexts. Although Korea currently provides the longest period of paid leave for exclusive use by fathers among OECD countries, this does not mean its substantive use by parents, or even public awareness of the policy itself. As my descriptive findings indicate, nearly half of the respondents are not very familiar with childcare policy for use by fathers, and 20% of them do not know about it at all. These multiple contingencies of receiving institutional support may be associated with the failure of the welfare state (Esping-Andersen 2009).

In a country with limited ability to provide high-quality institutional support for families, can support from husbands or grandparental childcare assistance increase the likelihood of second births? My results show positive effects of support from husbands and grandparents on the likelihood of second births. Women whose husbands' spent hours on housework and childcare are in the highest quartile are more likely to have second children than women whose husbands' spent hours on housework and childcare are in the lowest quartile. Moreover, it is worth noting that husbands' spent hours on housework and childcare matter only when they reach or exceed three hours per day. This suggests that a greater involvement of men in family care is an important source of supportive environments for family, contributing to increasing fertility (Goldscheider et al. 2015).

My results also support the positive effect of support from grandparental childcare assistance on having second children. Women who live with parents or in-laws providing childcare support are more likely to have second children than women who do not live with parents or in-laws not providing childcare support. This finding is consistent with previous studies, pointing to the importance of grandparental childcare assistance indicated by the geographical proximity and the availability of grandparental childcare on subsequent childbirths in Europe (e.g., Bühler and Philipov 2005; Hank and Kreyenfeld 2003; Rijken and Liefbroer 2009; Thomese and Liefbroer 2013). Given the Korean context, marked by the limited support of families by the state as well as low male involvement in family care, grandparental childcare assistance is a significant source of support for family.

These findings also contribute to our theoretical understanding of the interplay between the welfare state and the family in studies of fertility. Family sociologists emphasize the increasing importance of grandparents in contemporary families as families have longer "shared

lives” (e.g., Bengtson 2001) due to increased longevity. As my findings suggest, grandparents provide childcare support in times of need for their children. If grandparental childcare assistance is an important supplementary source of support in countries with a greater state support to families (Thomese and Liefbroer 2013), grandparental support may play a substantial role in countries like Korea, where state support is “limited and highly fragmented” support for the compatibility between work and family (Thévenon 2011:77). This fragmented support can also reduce the access to the available state support.

It is important that support from husbands or grandparents does not supplement support from institutions (i.e., parental leave policies or public childcare) in that context. Low public knowledge about family policies, low generalized trust toward the state, and the availability of public support for a limited time concerning a few life transitions throughout the life course may all contribute to a weak welfare state with persistent incompatibility between work and family. In this context, mothers’ employment opportunities are often restricted, so they tend to be full-time mothers. If mothers are employed, they must rely on support from extended family, usually grandmothers, on a regular basis (Hank and Buber 2009). This interaction between three sources of support for family raises concerns about the possible consequences of the low gender equity trap, which keeps increasing the family’s responsibilities. Korean families need to take care of their own members throughout the life course, instead of relying on ad-hoc public support. As long as the Korean family experiences increasing challenges to balance work and family, mostly relying on sources of support from their family of origin, the aggregate level of fertility in Korea will remain low, although some individuals have higher fertility because of the availability of these types of support. This may require an effort to integrate market employment to enhance

gender egalitarian relationships and policies (Kaufman and Bernhardt 2012) and to increase male involvement in the family (Goldscheider et al. 2015).

Interestingly, my findings suggest a puzzling picture of the role of supportive environments for family in fertility intentions and behavior. Supportive environments for family from three sources indicate stronger positive effects on actual fertility than fertility intentions for second children. This evidence is contradictory to previous findings that the determinants of intended fertility and actual fertility are relatively consistent based on 20 European countries (Harknett, Billari, and Medalia 2014) and the United States (Rindfuss et al. 1988). Although fertility intention itself is a strong predictor of actual fertility, my findings also suggest an inconsistency between fertility intentions and behavior (Harknett and Hartnett 2014; Morgan and Rackin 2010). In the context of strong societal norms about two-child family ideals and the notion of traditional marriage relationships, planning to have second children may be normative. This may explain why only factors relating to women's biological clocks matter. In contrast, having second children is more contingent upon the availability of resources that families can utilize, which can either provide opportunities or constraints. Thus, even with the desire for second children, it can be challenging for women to have second children without tangible support from institutions, husbands, parents, or in-laws.

This inconsistency between fertility intentions and fertility behavior leads me to ask further questions. What proportion of women actually realizes their intended fertility for a second child? In the next chapter, I answer this question by paying special attention to the role of gender equity in the family, in order to expand our understanding of what it means to gender equity in the family reflecting unique cultural legacy of patriarchal family gender relations and high educational aspirations.

CHAPTER 3

GENDER EQUITY AND THE REALIZATION OF FERTILITY INTENTIONS²¹

INTRODUCTION

As I discussed in Chapter 1, South Korea has experienced drastic decline in TFR from 3.43 in 1975 to 1.19 in 2014 (Statistics Korea 2014). However, two-child family ideals persist among South Korean men and women.²² Within the growing research on low fertility, Peter McDonald (2000a; 2000b) argues that within a given society the national emergence of low fertility stems from continued gender inequity. His approach focuses upon gender equity at the institutional level, such as labor markets, benefits from a welfare state, and most importantly within the family.

Gender equity theory provides insights into how gender inequity in institutions such as the family lowers individual fertility due to the role incompatibility between parenting and working in the labor force (Balbo, Billari, and Mills 2013; Torr and Short 2004). Examinations of gender equity are based primarily on evidence from European and North American cases, characterized by long-term low fertility rates and high female labor force participation (e.g., Mills, Mencarini, Tanturri, and Begall 2008; Torr and Short 2004). There is, as yet, relatively little evidence about the linkage between gender equity and fertility in non-Western low fertility contexts. The recent and rapid declines in fertility across East Asia may provide unique avenues for the examination of variation within a national setting. High levels of parental investment in children's education, also referred to as "education fever", are cited as an explanation for the

²¹ An article version of this chapter appears in *Asian Population Studies*. Yoon, Soo-Yeon. 2016. "Is Gender Inequality a Barrier to Realizing Fertility Intentions? Fertility Aspirations and Realizations in South Korea." *Asian Population Studies* 12(2): 203-219. DOI:10.1080/17441730.2016.1163873

²² According to the 2010 Korean National Survey on Family, the majority of South Korean men and women (61%) view a two-child family as ideal and another 20% identify three children as ideal.

extremely low fertility in South Korea (hereafter Korea), and East Asia more broadly (Anderson and Kohler 2013).

In this chapter, I investigate whether perceptions of gender equity within the family influence the realization of fertility desires within the context of institutional gender inequality. Do indications of higher gender equity in the family always have a positive impact on the realization of fertility intentions in low fertility countries? Is this true even within countries experiencing a relatively recent transition to low fertility and low gender equity regimes? Korea provides an interesting case of a rapid fertility decline, lowest-low fertility, low gender equity, weak institutional supports for child rearing, and, concurrently, a strong normative focus idealizing the two-child family. I aim to contribute to the literature on the link between gender equity and low fertility by confirming the importance of household labor sharing in a new context and incorporating a stronger focus on issues concerning parental educational responsibilities. Moreover, I explore how the relationship between gender equity within the family and individual fertility may work differently in concert with the unique gender equity contexts in Korea. To reflect a unique cultural emphasis on education, I expand gender equity theory to incorporate patterns of decision-making about children's education.

PREVIOUS FINDINGS & HYPOTHESES

Previous findings linking gender equity and fertility

Building upon McDonald's theory of gender equity and fertility, empirical studies have examined the implications for individual experiences by investigating the impact of gender equity in the family, usually as indicated by the division of household labor between couples (e.g., Cooke 2009; Mills et al. 2008; Oláh 2003; Torr and Short 2004) or gender role attitudes

within the family (e.g., Goldscheider et al. 2013), on fertility. Previous studies concerning the link between gender role attitudes and fertility suggest mixed findings depending on which aspect of gender role attitudes were examined, either women's role in the public sphere of work or men's role in the private sphere of the family (e.g., Miettinen et al. 2011; Philipov 2008; Westoff and Higgins 2009). Moreover, women holding egalitarian gender role attitudes may receive more support for housework and childcare from their husbands, which, in turn, may increase the realization of their desired fertility. As the theoretical idea linking gender equity and fertility has implications on the equitable division of household labor, men's familial roles should have a positive effect on fertility. This led me to formulate my first hypothesis concerning the positive impact of egalitarian gender role attitudes toward male role in the home on fertility, more specifically the realization of fertility intentions.

H1. Women who hold egalitarian gender role attitudes tend to be more likely to realize their fertility intentions than women holding traditional gender role attitudes.

Findings from several studies support a positive link between gender equity in the family, reflected in contributions to housework and childcare, and fertility *intentions* (Mills et al. 2008; Neyer, Lappegård, and Vignoli 2013; Oláh 2003; Tazi-Preve, Bichlbauer, and Goujon 2004) and fertility *outcomes* (Cooke 2009; Goldscheider, Bernhardt, and Branden 2013; Torr and Short 2004). Across existing research, male contributions to housework and childcare play a key role in shaping fertility intentions and outcomes, particularly in long standing low fertility and low gender equity countries, such as Italy (Miettinen et al. 2011) and Hungary (Oláh 2003). Will men's participation in housework and childcare positively affect fertility realization in Korea, as

found in Europe? Building upon the previous findings, I formulate a hypothesis concerning the impact of men's participation in housework and childcare on the realization of fertility intentions.

H2. Women whose husbands spend a high number of hours (>75%; more than 2 hours/day) on housework and childcare tend to be more likely to realize fertility intentions than women whose husbands do not.

If men's participation in housework and childcare has a positive effect on fertility, conversely, women's heavy responsibility of housework and childcare may negatively affect fertility.

Women's primary responsibility for housework and childcare may discourage women to realize their desired second child, although they had positive fertility intentions at Wave 1. This led me to construct my third hypothesis concerning women's responsibility for housework and childcare on the realization of fertility intentions for a second child.

H3. Women who spend a high number of hours (>75%; more than 10 hours/day) on housework and childcare tend to be less likely to realize intentions than women who spend less time on housework and childcare.

Household decision-making patterns and fertility

Women's involvement in household decision-making is a key element of gender equity in the family, reflecting women's voice and agency within the household (Folbre 1983; Morris 1990). Women's participation in household decision-making is most often studied in *high-fertility settings*, where findings indicate that women with high levels of household decision-making power are best able to control their fertility and limit family size (e.g., Morgan and Niraula 1995; Upadhyay and Karasek 2012). These studies, often based on rural settings,

examine women's decision-making concerning children's education, elder care, household spending and consumption.

In a context strongly emphasizing children's education as a means of upward social mobility and economic prosperity, does women's responsibility for their children's education represent female agency, or might this responsibility be an extra burden to housework and childcare? In Korea, education is one of the top priority tasks of family decision-making since education is viewed as a best means of upward social mobility and economic prosperity (Park, Byun, and Kim 2011). Korean education requires high parental involvement and investment, including academic extra-curricular activities, private tutors and careful monitoring of their children's academic success (Park et al. 2011).

Responsibility for the educational decisions concerning the first child is likely to be an important driver of extremely low fertility in Korea, where educational aspirations are great and state support is low. Responsibility in this sphere may reflect more of an obligation than an indicator of autonomy. Korea's cultural focus on raising successful children with extremely high parental involvement and investment can extend our understanding of household decision-making regarding child's education, contributing to the broader theoretical questions about how responsibility patterns reflect gender equity in the family and further relate to fertility. Studies on the link between gender equity and low fertility often exclude household decision-making as an indicator of gender equity. When institutional settings and traditional gender role expectations challenge balancing work and family, the fertility effect of educational responsibilities for children may interact with women's domestic responsibilities for housework and childcare.

H4. The fertility impact of patterns of parental educational responsibility differs by women's burden of housework and childcare: 1) Women-dominated educational

responsibility positively relates to the realization of fertility intentions, among women with relatively light housework and childcare burdens. 2) Joint educational responsibility with husbands positively relates to the realization of fertility intentions if women bear relatively higher housework and childcare burdens.

METHODS

Sample

A total of 7,031 respondents participated in all three waves of the study currently available. Questions concerning fertility intentions are limited to currently married women, younger than 45, with at least one birth experience. Within this group, I further restrict my analyses to married mothers of parity 1, under the age of 40 and expressing positive fertility intentions at Wave 1. I then trace fertility-related responses for this sub-sample across Wave 2 and Wave 3 with all valid responses for multivariate models (N=235).²³

The longitudinal nature of these data allows me to examine individual changes associated with key life transitions (i.e., transitions to a second birth) over the course of a three-year period. Three years are not enough to fully examine the realization of all desired second births, but it provides a sufficient number of years given the short intervals between first and second births.

Measures

- *Dependent variable: realization of fertility intentions*

I combine responses concerning married women's fertility intentions and their actual childbearing experiences across Waves 1 and 3 of the survey to identify those who have realized

²³ There were a total of 545 married mothers of parity 1, under the age of 40 at Wave 1. Of those, 304 women expressed positive intentions for a second child at Wave 1.

their fertility intentions and those who have not. Fertility intentions are measured at Wave 1, when respondents were asked if they planned to have another child in the future, with three possible options, including ‘yes’, ‘no’, and ‘don’t know’. I select only those reporting ‘yes’ for the construction of my dependent variable.²⁴ Among women with positive fertility intentions at Wave 1, births were noted at Wave 2 or 3. As presented in Table 1, nearly 40 percent of married women with one child and desiring a second at Wave 1 fail to have a second child by Wave 3. The issue of right censoring may lead to an underreporting of second births, but given the short birth intervals noted above, the effect should be relatively small.

- *Independent variables: Gender equity*

I examine the importance of four dimensions of gender equity within the family: gender role attitudes, husband’s hours spent on housework and childcare, wife’s hours on housework and childcare, and educational responsibility for the first child. These measures reflect answers at Wave 1, before the transition to a second child.

To explore whether egalitarian attitudes toward men’s family support positively affects the realization of fertility intentions for a second child (H1), I assess gender role attitudes with the following statement: “Dual-earner couples should equally share household labor.”

Respondents were asked to express their degree of agreement or disagreement on a four-point Likert scale (1 standing for a ‘strong agreement’ and 4 a ‘strong disagreement’). Due to few responses of ‘strong disagreement’, it was combined with ‘somewhat disagreement,’ resulting in

²⁴ Of women who expressed no intended second birth (N=241), only 19 women reported a second birth by Wave 3. It is impossible to know if these reflect unplanned pregnancies, spousal desires for another child or other factors. My central question concerns identifying factors, with an emphasis of the role of gender equity in the family, relating to the realization of their intended birth, so I opted to focus on women who expressed fertility intentions for a second child. I excluded respondents who were pregnant at the time of interview at Wave 3 (N=25). Little attention has been paid to unintended fertility in Asian low fertility setting with an exception of Raymo et al.’s (2014) recent study examining educational differences in unintended first births in Japan. In most cases, however, studies on unintended fertility, including Raymo et al.’s (2014) examine *retrospective* fertility intentions as the dependent variable. This approach is different from the one that I wanted to test in this paper, given that I focus on the realization of *prospective* fertility intentions.

a three-category response of traditional, moderate egalitarian, and strong egalitarian attitudes. Traditional attitudes are selected to serve as the reference category.

Husband's participation in housework and childcare is reported (in hours and minutes) by their wives. Generally, the amount of time men devote to household tasks is quite low²⁵. I code wives' reports of husbands' time spent doing housework and childcare per day (mean=1.39 hours, s.d=.14) into quartiles to test the fertility impact of men's contribution to the family (H2). I use the lowest quartile (<25%), of men contributing to housework and childcare, as the reference category. By utilizing quartiles, I can capture the threshold effects of husbands' time devoted to housework and childcare.

The self-reported number of housework and childcare hours per day is substantially higher for the women in my sample in comparison to men (mean=7.18 hours, s.d=.40). To enhance comparability, I also divide these reported figures into quartiles, and use the lowest quartile (<25%) as the reference category. This variable enables me to test the negative impact of women's spent hours on housework and childcare in determining the realization of an intended second birth.

Finally, I measure patterns of educational responsibility using responses to the question about decision-making patterns regarding child's education. I use the following question: "When your family makes a decision on children's education, whose opinion is mostly reflected in the decision?" Responses in the following four categories: "mostly my opinion," "mostly the husband's opinion," "the couple's opinion," or "together with other family members' opinion" are recorded. I excluded the response of "together with other family members" (N=5) and

²⁵ For my analytic sample, the average hours of household labor fulfilled by their husbands were 1.39 hours. Thus, relative sharing of spent hours on housework and childcare between couples does not provide enough variations to test its effect. United Nation assessments in 2003 also revealed that South Korean women spent 4.6 times more hours on unpaid work, housework and childcare than men. This is far higher than rates experienced, for example, by Dutch women (2.4) or Australian women (1.8).

“mostly the husband’s opinion” (N=7) due to its very small cell sizes. The remaining responses are divided between those reporting that the decision is mostly up to the wife and those reporting the decision is mostly the couple’s joint decision. In addition to using the direct effects to test educational responsibility patterns on the likelihood of a second birth, I add an interaction term of educational responsibility patterns and women’s spent hours on housework and childcare. This allows me to test H4, predicting that women primarily responsible for child’s educational decisions are more likely to have a second child, if their responsibilities for housework and childcare are not overly heavy.

- *Other control variables*

Guided by previous literatures, I include five socio-demographic control variables; age, employment, education, sib-ship and marital duration. These are factors shown as significant predictors of fertility realization, and controlling for them will clarify the relationships between my four vectors of gender equity and the realization of fertility intentions for a second child. Married women aged less than 30 at Wave 1 (reference category) were compared with between 30 and 34 and between 35 and 40. Employed women are compared with unemployed women. Employed women may be less likely to realize a second intended birth because of the expected conflict between work and family roles. Highly-educated women (i.e., holding a bachelor’s degree or higher) are compared with those with less education. Women whose husbands’ income falls in the highest quartile were compared with the rest of women whose husbands’ income is below 75%. I control for the number of respondents’ siblings, classify this variable into ‘having 3 or less’ and ‘more than 3’.²⁶ Lastly, I control for marital duration because women who have been married more than 5 years may be more likely to realize their intended second births, given

²⁶ The average number of respondents’ siblings is 3.24.

the short birth intervals between first and second births in Korea. Descriptive statistics for all independent variables measured at Wave 1 included in the analysis are presented in Table 5.

Analytic strategy

To assess the impact of gender equity on the realization of fertility intentions, I employ binary logistic regression models in which examining the effect of my independent variables from Wave 1 upon the likelihood of a second birth.²⁷ I report predicted probabilities in order to assess changes in the predicted probabilities of a second birth from Waves 2 and 3 in Table 6.

Calculations are adjusted for the PSU, and individual weights are employed in the bivariate and multivariate analyses.

²⁷ I tested issues of multicollinearity among independent variables and found no problem.

Table 5 Descriptive statistics of dependent and independent variables, married Korean women with one child, age 40 or younger at Wave 1, KLoWF 2007 (N=235)

Variable	Percent	Mean
Realization of fertility intentions		
Yes	62.10	
No	37.90	
Age		
Less than 30	45.23	
30-34	40.70	
35-40	14.07	
Employment (employed)	22.84	
Education (college degree or above)	34.20	
Mean husband's monthly income quartiles*		
Lowest quartile		127.42
2 nd quartile		191.72
3 rd quartile		266.71
Highest quartile		483.29
Sibling size		
3 or less	64.00	
More than 3	36.00	
Marital duration		
5 years or less	81.14	
More than 5 years	18.86	
Gender role attitudes		
Egalitarian	50.51	
Intermediate	42.55	
Traditional	6.94	
Mean husband's housework and childcare hours per day quartiles		
Lowest quartile		0
2 nd quartile		0.5
3 rd quartile		1.03
Highest quartile		3.48
Mean wife's housework and childcare hours per day quartiles		
Lowest quartile		1.40
2 nd quartile		2.71
3 rd quartile		3.72
Highest quartile		10.34
Patterns of decision-making about children's education		
Mostly women's decision	40.14	
Joint decision with husbands	59.86	

FINDINGS

The effect of gender equity on the realization of fertility intentions

In keeping with my hypotheses pertaining to the effects of gender equity variables, weighted logistic regression models assess the importance of specific indicators of gender equity, while controlling for other variables (Table 6). Results indicate that, net of socio-demographic controls, several measures of gender equity have a significant impact on the relative odds of realizing fertility intentions for a second child. I employ Model 1 for testing H1, H2, and H3, and employ Model 2 for testing H4.

Table 6 Logistic regression predicting patterns of realization of fertility intentions for married Korean women, age 40 or younger with parity one at Wave 1, KLoWF 2007-2010 (N=235)

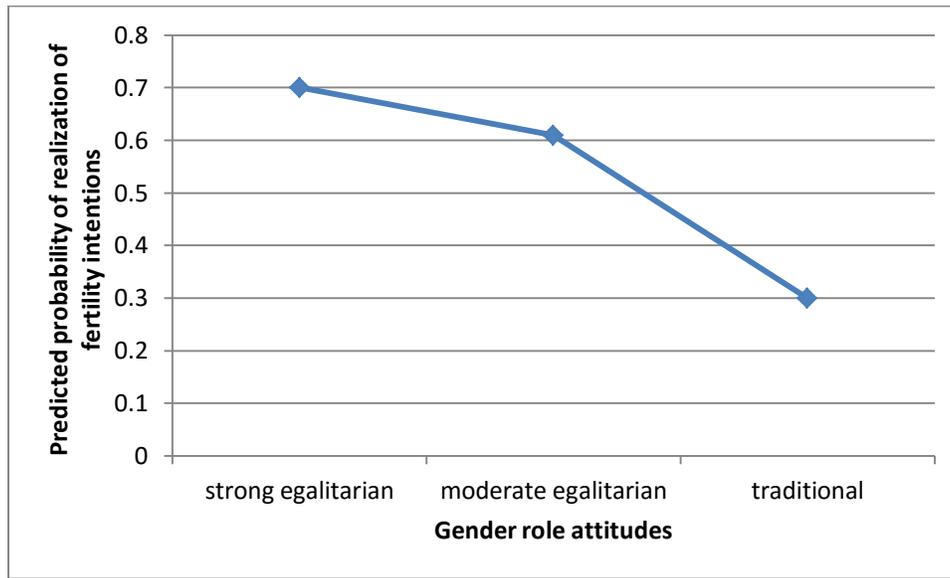
Variable	Model 1			Model 2		
	Coef.	S.E.	Odds ratio	Coef.	S.E.	Odds ratio
Age (relative to less than 30)						
30-34	.011	.394	1.011	-.053	.383	.948
35-40	-.841	.519	.431	-.934	.541	.393 ⁺
Employment (employed)	-.333	.426	.717	-.527	.432	.590
Education (college degree +)	-.211	.355	.810	-.108	.349	.898
Husband's income (top 25%)	.473	.444	1.605	.431	.461	1.539
Sibling size (more than 3)	-.103	.347	.902	-.124	.349	.884
Marital duration (5 years or less)	-.405	.460	.667	-.276	.489	.759
Gender role attitudes (ref. traditional)						
Moderately egalitarian	1.301	.652	3.690 *	1.253	.665	3.502 ⁺
Strongly Egalitarian	1.683	.663	5.381 *	1.675	.675	5.337 *
Husband's housework hours per day (ref. lowest quartile)						
2 nd quartile	.485	.451	1.624	.447	.444	1.564
3 rd quartile	-.006	.566	.994	-.057	.587	.944
Highest quartile	1.042	.485	2.834 *	1.024	.499	2.784 *
Wife's housework hours per day (ref. lowest quartile)						
2 nd quartile	-.838	.528	.433	-.677	.681	.508
3 rd quartile	-.301	.460	.739	.506	.540	1.659
Highest quartile	-.091	.519	.913	-.080	.656	.923
Responsibility for children's education (Mostly wife's decision)	-.194	.335	.824	1.214	.813	3.368
Wife's housework (2 nd quartile) X Mostly Wife's decision				-1.091	1.142	.336
Wife's housework (3 rd quartile) X Mostly Wife's decision				-2.515	.958	.081 **
Wife's housework (highest quartile) X Mostly Wife's decision				-.852	1.040	.426
Constant	-.464	.869	.629			.481

Note: ⁺ <.10; * p<0.05; ** p<0.01; *** p<0.001. S.E. denotes standard error.

In H1, I predict that egalitarian gender role attitudes increase the likelihood of realizing fertility intentions. Results from Model 1 support this hypothesis. Women's gender role attitudes play a significant role in the realization of fertility intentions for a second child. Among women at parity 1 who desire another child, women holding strong egalitarian gender role attitudes are 5.4 times more likely to realize fertility intentions for a second child when compared to women holding traditional attitudes. Women holding moderate egalitarian gender role attitudes are 3.7 times more likely to realize their intended second births than those holding traditional gender role attitudes, controlling for other aspects of gender equity and control variables.

Figure 6 presents the influence of the gender role attitudes on the likelihood of realizing an intended second birth. I estimate the probability of the realization of fertility intentions for a second child based on the regression coefficients for gender role attitudes, holding all other model variables at their means. 70 percent of women holding strong egalitarian gender role attitudes and 61 percent of women holding moderate egalitarian gender role attitudes are expected to realize their intended second births. By contrast, only 30 percent of women holding traditional gender role attitudes are expected to realize their fertility intentions for a second child. Women holding traditional gender role attitudes may fail to realize their intentions for a second child due to high expectations for their role in the family as wives and mothers, both from themselves and other family members. Fulfilling expectations at home and in the economy may well mean that having a second child is 'too much' for these more traditional women.

Figure 6 Predicted probabilities for realizing fertility intentions for a second child by gender role



I predict a positive impact of husbands' participation in housework and childcare on the realization of women's fertility intentions in H2. Results support my hypothesis, providing evidence the husbands' participation in housework and childcare increases the likelihood of realizing fertility intentions for a second child.²⁸ Women whose husbands spend the highest amount of time (i.e., on average, 3.5 hours per day) on housework and childcare are nearly 3 times more likely to realize fertility intentions for a second child than women whose husbands are in the lowest quartile of reported housework and childcare (i.e., no participation). Women with husbands spending moderate hours on housework and childcare (the 2nd or the 3rd quartiles of this measure) are not more likely to realize their fertility intentions for a second child. These results support the contention that having a partner who is contributing to housework and

²⁸ In some previous studies, the division of household labor between spouses has been measured using the percentage of time each spouse spends in housework and childcare tasks relative to the total amount of time spent on housework and childcare (e.g., Cooke 2009; Torr and Short 2004). I performed a further analysis using different measures for the division of housework and childcare in order to investigate whether the results would be similar to those presented in Table 6. The results show very consistent findings. All variables of gender equity in the family show consistent effects on the realization of fertility intentions. As the amount of time husbands spend in housework and childcare increases the likelihood of realizing fertility intentions, women whose husbands' share of housework and childcare are in the highest quartile show a greater likelihood of realizing fertility intentions (results not shown).

childcare is an important factor in increasing Korean fertility outcomes, even when controlling for women's own housework and childcare hours. This effect is only significant for women whose husbands are in the highest quartile of reported housework and childcare. This may represent the threshold effects of men's participation in housework and childcare. Results suggest that this threshold effect lies at a point beyond the amount of time men typically spent on housework and childcare.²⁹ Table 1 shows a radical change of men's average spent hours on housework and childcare between the 3rd quartile and the 4th quartile. In the Korean context, where support from other avenues is nearly absent, findings suggest that to have a significant positive impact on the likelihood of realization of women's fertility intentions for a second child, an average of 3.5 hours of housework and childcare per day by a husband is needed.

Shifting the focus to women's domestic responsibilities, in H3 I predict that higher levels of time spent on housework and childcare by women would lower the odds of realizing fertility intentions for a second child. Results, among women expressing a desire for a second child, provide no clear evidence to support this hypothesis. Compared to women who report spending the least amount of time on housework and childcare, women who spent more hours on housework and childcare appear less likely to realize their fertility intentions for a second child, but the relationship is not statistically significant.

Lastly, I anticipate that the impact of patterns of decision-making about child's education depends on women's housework and childcare burden (H4). In Model 2, I add an interaction term between women's daily hours of housework and childcare and patterns of household decision-making in the area of child's education to test H4. The results for main effects (Model 1) indicate that mother's primary responsibility for educational decision-making does not

²⁹ Similarly, there is evidence of threshold effects of housework on wages for married women and men (e.g., Hersh 2009).

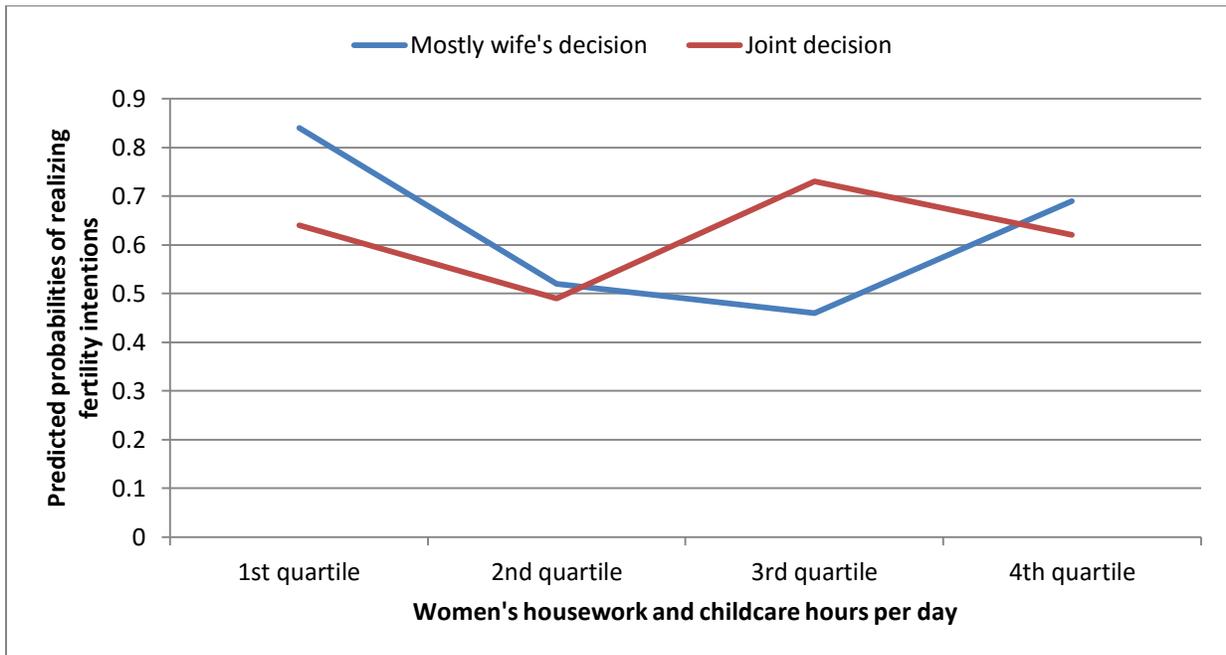
significantly affect the likelihood of realizing fertility intentions for a second child, when compared to women who jointly decide their child's education with their husbands. Results from Model 2 suggest that responsibility for child's education impact the realization of fertility intentions for a second child, but the effect depends upon women's housework and childcare burdens. Compared to women who jointly decide their child's education with the husbands, women who are mainly responsible for their child's education and those in the 3rd quartile of hours spent on housework and childcare are significantly less likely to realize their fertility intentions for a second child than those in the lowest quartile. Compared to women who jointly decide their child's education, women who are mainly responsible for their child's education and those in the 2nd or the 4th quartile of hours spent on housework and childcare are not less likely to realize their fertility intentions for a second child than those in the lowest quartile. The effects for the other two gender equity measures, gender role attitudes, and husbands' housework and childcare hours, maintain significance for predicting the realization of fertility intentions as presented in Model 1.

I plot the predicted probabilities in Figure 7. Among women who spend the least amount of time (on average, 1.4 hours per day) on housework and childcare, women who mostly decide child's education indicate a higher predicted probability (0.84) to realize an intended second birth than those who jointly decide their child's education (0.64). The predicted probabilities of realizing a second intended birth drop to approximately 0.50 for women in the second quartile of hours spent on housework and childcare (i.e. 2.7 hours per day). In contrast, for women who spend nearly 4 hours (3rd quartile) per day doing housework and childcare, women who jointly decide their child's education with their husbands show a higher predicted probability (0.73) to realize fertility intentions for a second child, compared to that of women who mostly decide their

child's education (0.46). Lastly, among women whose housework and childcare hours are an average of 10 hours per day (highest quartile), women who jointly decide their child's education with the husbands have a predicted probability of 0.69 while that of women who mostly decide their child's education is 0.62.

Findings suggest a non-linear effect of patterns of educational responsibility on the realization of fertility intentions for a second child, which depends on women's spent hours on housework and childcare. Women who spend nearly 4 hours on housework and childcare per day (3rd quartile) are more likely to work in the labor force, compared to women whose housework and childcare hours exceed 10 hours per day. This suggests that women who try to balance their roles in the labor force and family may feel "extra burden" or "second shift" (Hochschild 1989) due to their husbands' limited participation in housework and childcare as well as educational responsibility for their child. Subsequently, these perceived challenges significantly lower the likelihood of realizing women's intended second birth. This finding indicates that general domestic responsibilities leave out another aspect of the division of household labor: educational planning. In a context of strong female role expectations and high emphasis on educational attainment, being responsible for children's education may not necessarily reflect women's autonomy, but rather a unique increase in women's domestic burden. 'Second shift' for Korean women may mean not only doing housework and childcare, also being responsible for their child's education, ultimately raising a high quality child under the influence of 'education fever'.

Figure 7 Predicted probabilities by women's housework and childcare hours and patterns of decision-making



My findings fail to reflect the importance of the demographic and socioeconomic control variables suggested by the literature. Age, employment status, educational attainment, sib-ship, husbands' income and marital duration have no significant impact on the realization of fertility intentions for a second child in the model with main effects (Model 1). Age does gain statistical significance in Model 2 indicating (unsurprisingly) that women aged 35 or above are less likely to realize their fertility intentions for a second child in comparison to women under 30 years of age (at .10). This result is reflective of the national trends in fertility in Korea, which decline markedly past 35 (Kye 2012).³⁰ No significant impact of individual characteristics on the realization of fertility intentions may indicate that the current very low fertility in Korea is associated with period-related factors.

³⁰ The age pattern of fertility in 2013 shows its peak fertility occurring in women in the age group 30-34 (111.4 per 1,000 females) and the abrupt decline after 35. The respective age-specific fertility rates for women in the age group 35-39 and 40-44 are 39.5 and 4.8 per 1,000 females with the TFR of 1.19 (Statistics Korea 2013).

DISCUSSION AND CONCLUSION

In hopes of confirming and expanding the links between gender equity and fertility, the goal of this chapter was to examine the realization of fertility intentions within a context of rapid fertility decline and institutional gender inequality. South Korea, marked by rapid and recent fertility decline and low gender equity, differs substantially from the European countries often used as case studies for gender equity (where long-term low fertility and a stronger tradition of female labor force participation are common). Results from Korea point to the importance of gender equity in the family for understanding individual variation in fertility within a low fertility country. By investigating four facets of gender equity, I seek to confirm and expand theories of gender equity and low fertility. I find that among women at parity one who report the desire for a second child, those who hold egalitarian gender role attitudes are more likely to realize their intended second births, compared to women with traditional gender role attitudes. Men's time spent in housework and childcare increases the likelihood of realizing intended second births. Women's daily hours for housework and childcare were alone not clearly important in Korean case. Patterns' of educational responsibility play a unique and important role interacting with women's housework and childcare burdens in realizing second births.

The Korean case contributes to our understanding how indicators of gender equity within the family operate differently in a unique contextual background. Contexts characterized by a rapid fertility decline, lowest-low fertility, low gender equity regimes, and weak institutional support for childrearing confirm and challenge findings from European and North American cases. Linking to the notion of "incomplete gender revolution" in the private sphere regarding men's roles (Goldscheider et al. 2015), the findings suggest that Korean women with traditional gender role attitudes may face high levels of role conflict, lowering the likelihood of realizing an

intended second birth as gender role attitudes lay the foundation in the shape of the sharing of household responsibilities. Hence, women holding traditional gender role attitudes may receive very little support for housework and childcare from their husbands. These women with traditional gender role attitudes may feel much higher pressure on their expected roles in the family, including raising a high-quality child, with no or little support from husbands and institutions.

My findings reinforce the importance of men's commitment to housework and childcare for realizing women's intended second births, affirming recent findings on the positive relationship between men's participation in housework and childcare and fertility in Europe (Cooke 2009; Oláh 2003). These results underscore the importance of male involvement in the family as a powerful pathway for increasing fertility within low fertility contexts.

Integrating patterns of educational responsibility as a dimension of gender equity in the family also extend the gender equity literature. This topic has yet to receive much attention in Western-oriented low fertility theories. My findings indicate that the fertility impact of women's educational responsibility for their child interact with women's domestic responsibilities for housework and childcare. Women who are the primary decision makers regarding their child's education and have heavy burdens on housework and childcare (the 3rd quartile) face the lowest probability of realizing their intended second birth. These women may try to balance their roles between work and family rather than giving priority to either family or work. This finding challenges previous studies in high fertility settings, as it suggests that women's main responsibility for their children's education may not always represent autonomy. Instead, over-reliance on mothers' educational responsibility may indicate another taxing facet of domestic responsibilities, expanding our conventional understanding of the 'second shift' of housework

and childcare. This is particularly relevant in the context of low gender equity and high cultural importance placed on education, such as in Korea and perhaps East Asia, more generally (Anderson and Kohler 2013).

Building upon previous studies examining the realization of fertility intentions, I investigated factors that facilitate or inhibit the realization of fertility intentions for a second child. Contradictory to previous findings about the importance of demographic and socioeconomic variables, my findings reveal that individual characteristics have no significant impact on the realization of fertility intentions for a second child in this sample of Korean women. This may indicate that low fertility in Korea is associated with period effect (Kye 2012). This has implications on the interaction between the role of family and gender equity regimes for fertility outcomes, calling for improvement in gender equity in both public and private spheres.

This study has a few limitations. Since my analytic sample is somewhat homogeneous (e.g., all currently married and positive intention for a second child), selection effects are a concern. Future research with a more heterogeneous sample in terms of partnership status may produce different results, as previous studies identify partnership status as an important determinant of fertility realization (e.g., Balbo and Mills 2011; Harknett and Hartnett 2014). My analytical sample may also be selected for higher gender equity as I limited it to those with positive fertility intentions for a second child. Unobserved factors affecting sample selection (i.e., positive fertility intentions at Wave 1) may affect my outcome variable. Future research with a larger number of sample and longer period of coverage will provide insight into the examination of different mechanisms of childbearing decision-making concerning unintended (e.g., mistimed or unwanted) births.

Measurement issues, linked to the available indicators in this data set also hinder the precision of the models. I assess men's participation in housework and childcare based on women's estimates of their husband's contributions, which may be biased. Future research, employing other data sets, would do well to utilize men's direct reports. Finally, this analysis was confined to a time frame of three years. Three years may not be a long enough period of time in which to realize fertility intentions for some women. In future studies, I will include additional waves of the KLoWF for a deeper discussion of the correspondence between fertility intentions and behavior including the differentiation of birth spacing and stopping.

Overall, my findings contribute to the gender equity literature by providing insights from gender equity within the family revealing potential influences on fertility outcomes that may have implications for fertility recovery among settings in which low fertility norms are not yet fully culturally normative. Greater attention to men's commitment to family by sharing housework and childcare, and educational responsibility may assist both scholars and policy makers in countries where many women fall short of realizing their fertility intentions in similar contextual backgrounds. Future research would do well to carefully assess how educational responsibilities affects gender equity within the family and individual fertility outcomes, as we seek to better understand low fertility across cultures and contexts.

In this chapter, I found some support for positive impact of gender equity in the family on the realization of fertility intentions for a second child. In the next chapter, I explore the relationship between gender equity in the family and marital quality in order to understand how these work together and its implications on fertility outcomes.

CHAPTER 4

THE RELATIONSHIP BETWEEN GENDER EQUITY IN THE FAMILY, MARITAL QUALITY AND FERTILITY BEHAVIOR

INTRODUCTION

As I discussed in the introductory chapter, South Korea has experienced massive demographic, economic and social transformation over the past forty years. However, many aspects of the traditional, patriarchal family structure have not changed much. As the descriptive findings in the previous chapters indicate, only a quarter of my analytic sample (i.e., married women with one child) were employed and the rest of the women were in male breadwinner-female homemaker family models.

Research suggests that women in most industrialized countries, including the most gender-equal societies still perform more household responsibilities than their husbands, since gender remains a key predictor of who performs household labor, including housework and childcare (Forste and Fox 2012; Greenstein 2009; Hook 2006). Comparative studies also reveal that contexts and places are significant in defining gender role expectations and highlight their interplay with individual-level factors (Fox 2009; Hook 2006). Geist (2005), for instance, suggests that equal sharing of household labor is shaped by contextual factors, such as welfare regimes, and found that social-democratic welfare regimes indicate more equal sharing of household labor than conservative societies.

Throughout the previous chapters, I discussed the limited state support for families and low levels of gender equity in South Korea with regard to their implications for issues of low fertility. Reflecting this contextual background, in chapter 3 I demonstrated that gender inequity in the family plays an important role in realizing women's intentions to have a second child. In

addition, I argued that heavy reliance on women's educational responsibility for a child's education may be another aspect of gender inequity in the family, especially in contexts characterized by high educational aspirations. But it remains unclear how gender equity in the family correlates with women's marital quality. Does gender equity in the family, represented by more equal sharing of household labor and childcare and shared educational responsibility between couples, mean higher marital quality for women? Further, does marital quality matter at all for women's fertility? Evidence about the influence of marital quality on fertility is sparse. The existing literature on this topic presents a puzzling picture regarding the impact of marital quality on fertility, although these studies are based on cases from Western contexts where marriage and childbearing are relatively loosely connected (Buchmann and Kriesi 2011).

Little attention has been paid to the importance of partner relationship quality in understanding low fertility in non-Western contexts, such as advanced Asian countries. There is a substantial contextual and institutional difference in the ways by which the relationship between fertility and marriage operates in South Korea versus the ways it operates in Western countries. Recently, there has been growing research on marital quality and its determinants in non-Western contexts, including Nepal (e.g., Allendorf and Ghimire 2013) and China, Japan, and South Korea (Oshio, Nozaki, and Kobayashi 2013). This expansion into non-Western contexts provides opportunities for comparison across contexts (Allendorf and Ghimire 2013). Oshio and his colleagues (2013) suggested that it is reasonable to predict that marital dissatisfaction relating to the unequal sharing of housework between couples reduces fertility desires in East Asian countries. However, we do not know much about the impact of marital quality on fertility in contexts where the traditional male breadwinner and female homemaker family model is common.

The aim of this chapter is twofold: first, I examine the relationship between gender equity in the family and marital quality. Second, I investigate whether higher marital quality leads to having a second child. By looking at the intersection of marriage, family and fertility, this chapter contributes to broader theoretical questions about the relationship between gender equity in the family and marital quality, and their impact on fertility. I address the question of whether marital quality influences women's fertility intentions and fertility outcomes in South Korea; and if so, what aspects of marital quality encourage or impede women in having a second child? The South Korean context provides a new opportunity to examine which aspects of marital relationship affect women's childbearing decision-making in contexts where fertility is highly constrained by the institutional conditions.

PREVIOUS FINDINGS & HYPOTHESES

Gender equity in the family and marital quality

Sociological studies on the division of household labor suggest that more equal sharing of household labor is positively associated with higher marital quality for women (Forste and Fox, 2011). Amato and his colleagues (2007), for example, report that husbands' share of housework has a positive effect on women's marital happiness, and has a negative effect on marital problems and divorce proneness in the U.S. Similarly, Stevens, Kiger, and Riley (2001) find that hours spent by women on housework negatively influences their marital satisfaction, but hours spent by men on housework does not negatively influence their marital satisfaction. In general, women report lower marital satisfaction or marital happiness and are more likely to be affected by the division of household labor than men (Stevens et al. 2001). Likewise, recent evidence from Norway also supports this view by showing a strong correlation between the actual division

of household labor and satisfaction with this division for women, but a much weaker correlation for men (Barstad 2014: 987).

However, the relationship between the division of household labor and marital quality varies by context (reflecting institutional and normative backgrounds), female employment, and gender role attitudes (usually held by women) (Baxter and Western 1998; Greenstein 1996; 2009). Gender role attitudes affect the amount of time spent on household labor, and they also influence women's perceived gender (in)equity in the family concerning the division of household labor. Greenstein (1996) finds that perceived unfairness of the division of household labor has a stronger negative impact on marital quality for wives holding egalitarian gender role attitudes than for wives holding traditional attitudes. Using data from the Japanese General Social Survey, Kaufman and Taniguchi (2009) suggest that women report lower marital happiness when they hold more egalitarian attitudes.

Studies have compared egalitarian women with traditional women by using the terms of "gender role attitudes" or "gender ideology". Doucet (2006: 193) conceptualized gender ideology as "a set of social beliefs about men's and women's roles and relationships in varied social institutions." This implies that a woman may express both egalitarian and traditional attitudes, such as expressing traditional attitudes toward women's roles in the family, but egalitarian attitudes toward women's roles in the public sphere. In association with this concern, different measures of gender role attitudes further complicate the issue. For instance, two studies examining the effects of gender role attitudes on fertility, utilizing the same survey data, found conflicting results about the relationship (see Puur et al. 2008 and Westoff and Higgins 2009 for varying results). Their studies differed in the measures they used for gender role attitudes, for instance, whether they measured attitudes toward gender roles in the public sphere or in the

private sphere (Goldscheider et al. 2010; Miettinen et al. 2011). With this in mind, gender role attitudes may be more closely associated with the gendered division of household labor and marital quality in some cases than in others for two possible reasons. One reason may be varying measures of gender role attitudes. The other may be the perceived meanings of gender role attitudes and their relations with the division of household labor or marital quality shaped by societal context (Forste and Fox 2012).

Importantly, Greenstein (2009) find that the effect of inequity in the division of household labor on perceived fairness and the effect of perceived fairness on family satisfaction depend on national context (i.e., *the national-level of gender equity*). His cross-national analysis shows that the unequal division of household labor has a trivial effect on perceived fairness in countries with low levels of gender equity, and the impact of perceived fairness of the division of household labor on family satisfaction is also relatively small. Conversely, the effects of perceived (un)equal division of household labor are strong in countries with high levels of gender equity.

Likewise, the determinants of marital quality may also differ by context. Lee and Ono (2008) explored the differences in the determinants of marital happiness for Japanese women and American women. Their findings suggest that Japanese women report happier marriages when they take primary responsibility for household labor and their household income is high, while American women report happier marriages when their own income is high. In a comparative study of three East Asian countries, including China, Japan, and South Korea, Oshio, Nozaki, and Kobayashi (2013) confirm the negative relationship between the shared division of household labor and marital satisfaction for women in all three countries. Moreover, their descriptive findings indicate that women's share of housework is more than 75% in all three

countries, even when they are dual-earner couples. Lee et al. (2004) find that South Korean married women who reported difficulties with balancing family work and paid work showed higher levels of depression than their counterparts who did not have difficulty balancing two kinds of work.

Findings from reviewed studies form the basis for a set of my first hypotheses:

H1a: Women's high share of housework and childcare is likely to be negatively associated with women's marital quality.

H1b: Negative association between women's high share of housework and childcare and marital quality is likely to be stronger for women holding egalitarian gender role attitudes than for women holding traditional gender role attitudes.

Additionally, I incorporate responsibility for a child's education as a part of gender equity in the family, as I argued in chapter 3. Previous research on marriage and families in Asian countries emphasizes women's role in society relating to family obligations. Due to high educational aspirations across Asian countries, parents – especially mothers – are responsible for raising “high-quality” children (Eun 2007; Jones 2007). If women face a substantial amount of pressure to meet this goal, they are likely to have lower marital quality. Similarly, Forste and Fox (2012) suggest that joint decision-making about family matters³¹ has a positive effect on respondents' family satisfaction. Thus, my second hypothesis is:

H2: Women who hold the primary responsibility for their children's education are more likely to report lower marital quality than women whose husbands have joint responsibility for their children's education.

³¹ Forste and Fox (2012) use the following two questions to determine whether a couple practices joint decision-making: 1) “Who has the final say in choosing shared weekend activities?” and 2) “Who has the final say in buying major things for the home?”

Marital quality and fertility

There remains the question of whether a substantial burden of housework for women and its negative relationship with marital satisfaction would affect fertility (Oshio et al. 2013: 220). The growth of unstable relationships, including high rates of divorce, has brought increased attention to the influence of a union's stability or relationship quality on childbearing (Balbo et al. 2013). Previous studies have identified two opposing mechanisms in the association between relationship stability and fertility. One point of view finds that a stable marital relationship increases the chances of having a(nother) child. Lillard and Waite (1993) hypothesized that couples who are prone to separation are more likely to delay childbearing, and this delay also leads to wider birth intervals. Couples perceive that having children will increase the cost of marital dissolution, so couples with higher levels of marital instability are less likely to have a child.

Conversely, building on the rational choice model of fertility, Friedman, Hechter and Kanazawa (1994) proposed that union instability is positively associated with childbearing since having children is a way of reducing uncertainty within marriage and enhancing marital solidarity in developed societies. They assumed that rational couples seek to reduce uncertainty in their marriage by having a child, thereby increasing the spouses' dependence on each other and improving marital solidarity. Marital solidarity is a multidimensional quality of the relationship based on financial ties, occupational ties, and ties of common interest (Friedman et al. 1994: 386).

A few studies using data from the U.S. support the first theoretical framework. Lillard and Waite (1993) found the negative impact of marital dissolution on the timing of childbearing in the U.S. This confirms previous findings regarding the negative relationship between marital

disruption and childbearing (Thornton 1978). Myers' (1997) findings also support the positive impact of marital solidarity and compatibility (i.e., spouses' involvement with each other) on the transition to parenthood and higher-order births in the U.S.

The studies reviewed above mainly focus on the role that marital (in)stability plays in the likelihood of childbearing (Rijken and Liefbroer 2009). However, marital quality can include not only the stability of the relationship, but also the behavioral or evaluative aspects (e.g., satisfaction) of the marital relationship (Amato et al. 2003; Johnson et al. 1986). Drawing on the multidimensional approach to marital quality, recent studies have investigated the effect of marital quality on fertility behavior. Results are rather mixed. Rijken and Liefbroer (2009) extend the previous two opposing theoretical hypotheses on union stability to the effect of relationship quality on fertility behavior. They measured marital quality in four dimensions, including positive and negative interaction, value consensus, and separation proneness. Their findings suggest that couples postpone higher-order births (second or third births) if they have a high level of negative interactions but also if they have a high level of positive interactions. Put differently, couples were most likely to give birth when they experienced a medium-quality relationship (i.e., not having either excessively negative or positive interactions) with partners. By constructing a scale of relationship quality measure, Rijken and Thomson (2011) also confirmed the curvilinear relationship between perceived relationship quality and fertility for Dutch women, while Lainiala (2011) found a positive linear relationship between women's relationship quality on second births in Finland. Investigating which dimensions of relationship quality have a significant impact on fertility would extend our current understanding of the link between the two (Lainiala 2011: 45).

Due to limited evidence, it is not clear whether the mechanism of the impact of marital quality on fertility might be different in other contexts. Moreover, although studies examining the case of non-Western contexts have paid increasing attention to marital quality in recent years (e.g., Allendorf and Ghimire 2013), implications for fertility have been little studied. In contexts characterized by a “marriage package,” meaning marriage comes with multiple intro-familial roles (Bumpass et al. 2009; Rindfuss 2004), and an inhospitable institutional environment which contributes to very low fertility (McDonald 2013), a high-quality marriage may be a necessary condition for having a second child. Guided by these previous studies, I formulate my third hypothesis concerning the impact of marital quality on fertility behavior:

H3: Higher marital quality is likely to positively influence women’s second birth.

DATA AND METHODS

Sample

As in the two previous chapters, I use data from three waves of the Korean Longitudinal Survey of Women & Families (KLoWF), conducted by the Korean Women’s Development Institute in 2007, 2008 and 2010. I use data on marital quality, fertility intentions, and all other control variables from Wave 1 and data on actual childbirths from Waves 2 and 3. For this study, I selected married women with one child who were aged 19-40 years at the time of Wave 1. Since only a few women progressed to third births by Wave 3, I focus on the transition to second births. My restrictions resulted in a sample of 463 women.

Dependent variables

The survey includes several questions suited for assessing marital quality. *Marital quality* is operationalized in a multidimensional way, including four distinctive aspects reflecting both

positive and negative dimensions. First, I constructed an index of *spousal relationship quality*, based on questions that focus on the overall global assessments of the wife's relationship with her husband. The spousal relationship quality index includes the following four items: "I usually talk a lot with my husband," "I have similar views with my husband," "I am satisfied with the sexual relationship with my husband," and "I trust my husband." The alpha coefficient of the spousal relationship scale is .94. The responses are scored on a four-point scale ranging from 1 (strongly agree) to 4 (strongly disagree). I summed the reverse-coded items and dichotomized due to highly skewed distribution. The scores of the low group on low spousal relationship quality³² were coded into 1, and the medium and high scores were coded into 0. Second, I measured *marital happiness* with one item: "All in all, what is the best description of your feeling about your current marital life with your husband?" Answers are scored on a seven-point scale ranging from 1 (very unhappy) to 7 (very happy). Because of a highly skewed distribution of the responses, I dichotomized the variable by singling out the approximately lowest quarter (21.66%) in terms of marital happiness.³³

Third, I measured *separation proneness* with one item: "Have you ever thought you'd be better off living apart from your husband in the past month?" Answers are coded as a dichotomous variable (0=no, 1=yes). Lastly, I included *satisfaction with division of housework and childcare* as a dimension of marital quality more directly related to the possible impact of the division of housework and childcare, following Barstad (2014). I used the following question: "How satisfied or dissatisfied are you with the sharing of housework such as washing dishes and cleaning up the house, including childcare, with your husband?" Answers are coded on a 5-point scale ranging from 1 (strongly satisfied) to 5 (strongly dissatisfied). I dichotomized the scores by

³² It corresponds to a score of 11 or lower (range from 4 to 16).

³³ It corresponds to a score of 4 or lower (range from 1 to 7).

giving the value of 1 if respondents were ‘very dissatisfied’, ‘somewhat dissatisfied’, or ‘neither satisfied nor dissatisfied’; and 0 if respondents were ‘very satisfied’ or ‘somewhat satisfied’.

Marital quality serves as a dependent variable for the first and the second hypotheses and then serves as an independent variable for the third hypothesis.

Birth of a second child. The dependent variable for the third hypothesis is the likelihood of a woman having a second child between Wave 1 and Wave 3 (2007-2010) or being pregnant during Wave 3.

Independent variables

Gender equity in the family is operationalized in two ways: First, I used *the division of housework and childcare between couples* as a measure of gender equity in the family. As I discussed in chapter 3, this measure is mostly widely used in sociological studies. Respondents were asked to report how much time they and their husbands spent on weekdays and weekends on housework (e.g., washing dishes, cleaning up, etc.) and childcare. To measure gender equity, I calculated relative shares for wives by dividing the averaged report of housework and childcare hours for respondents by the averaged report of all housework and childcare hours contributed by husbands and wives, following Greenstein (2009) and Torr and Short (2004). Second, I incorporated *parents’ educational responsibility* as a measure of gender equity in the family (given the importance in South Korean context as I argued in chapter 3). I compared women’s main responsibility for their children’s education with joint decision-making about children’s education with husbands.

Gender role attitudes are likely to influence respondents’ perceived fairness with regard to themselves and their husbands, as I expected in H1b. They are also likely to affect respondents’

feelings about their share of housework and childcare, marital happiness, and ultimately fertility. Previous studies have measured gender role attitudes in diverse ways, including constructing an index based on multiple items or using a single item (Lachance-Grazela and Bouchard 2010). In this chapter, I measure gender role attitudes by focusing on women's attitudes towards the traditional breadwinner family gender role set. The measure of gender role attitudes was based on level of agreement with the following statement: "It is ideal for man to earn money and for woman to take care of family." Although wordings of this question vary by survey, this item is one of the most frequently used ones in the literature.³⁴ Response choices were from 1 (strongly agree) to 4 (strongly disagree). For analytic purposes I dichotomized the responses and compared women with traditional attitudes (those who agreed with the statement) to women with egalitarian attitudes (those who disagreed with the statement).

Control variables. Guided by the previous studies on marital quality (e.g., Allendorf and Ghimire 2013; Barstad 2014), I controlled for socio-demographic factors, including respondents' age groups, education of the respondents and husbands, respondents' shares of household income, household income, and marital duration. I compared married women aged less than 30 years at Wave 1 with women aged 30 to 34 and women aged 35 or above. I used the highest educational level attained to measure education and collapsed the responses into two categories (0=below a bachelor's degree, 1=bachelor's degree or higher). I measured respondents' shares of household income as two dummy variables. I first calculated household income by adding respondents' own income and husbands' income. I then calculated relative shares for wives by dividing wives' income by the household income contributed by husbands and wives together. I coded the first dummy variable 1 if the respondents' share of household income was greater than 0 and less than

³⁴ Studies based on 1994 and 2002 modules of the International Social Survey Programme (ISSP) used this statement for their index measure of a single item measure (see Davis et al. 2007; Fuwa 2004; Knudsen and Wæerness 2008).

39% (0 otherwise). I coded the second dummy variable 1 if the respondents' share of household income was 39% or greater. The reference category is respondents whose share of household income is 0 and who are unemployed. I measured household income as a dummy variable (1=the lowest household income, 0 if otherwise). I calculated marital duration based on responses for the married year from data at Wave 1. Given the fact that the national average marital duration for South Korean parents having a second child is 4.55 years (Statistics Korea 2013), I compared women married "5 years or less" with those married "more than 5 years."

Lastly, I also controlled for respondents' subjective health, which is known for a determinant of marital quality (e.g., Barstad 2014; Oshio et al. 2013). Subjective health is measured with one question about respondents' self-evaluation of health, ranging from 1 (very good) to 5 (very bad). I compared women whose self-evaluation of their health was very good (28%) with the rest of the women. Having domestic help may also be associated with gender equity in the family or with women's marital quality. Given that few of my sample hired domestic help (N=4), however, this factor could not be controlled in this study. Research suggests that fertility intention is a strong predictor of fertility behavior (Kaufman and Bernhardt 2012; Schoen et al. 1999), so I controlled for fertility intention in the models predicting a second childbirth. I measured this with the question asked in Wave 1: "Do you plan to have any children?" (0=no/don't know, 1=yes).

Method

I examined the relationship between gender equity in the family and marital quality using binary logistic regression models for each of the four dimensions of marital quality. Then I examined whether or not marital quality had a significant effect on the probability of having a second child

between Wave 1, 2 and Wave 3, controlling for other socio-demographic factors and fertility intentions at Wave 1.

FINDINGS

Descriptive results

In Table 7 I present descriptive statistics for the sample. About 41% of women with one child had a second child or were pregnant with a second child at Wave 3. About a half of my sample were dissatisfied with the division of housework and childcare. Slightly over 20% of the sample reported low spousal relationship quality or low marital happiness. Compared with other indicators of marital quality, relatively few women thought of separation (9.8%). Even women whose relative share of housework and childcare was lowest performed an average of 62.4% of housework and childcare. These descriptive statistics are similar with Oshio et al.'s (2013) findings suggesting Korean women's high share of housework, even for dual-earner couples. Nearly a half of the respondents were mainly responsible for their children's education. About 42% of respondents held traditional gender role attitudes.

The average age was 31 years. About 37% of the respondents and 53% of the respondents' husbands were highly educated. About two thirds of respondents were unemployed. On average, the respondents had been married 5.1 years. Twenty-eight percent of them reported very good subjective health status.

Table 7 Descriptive statistics (weighted) for married women, age 40 or younger with one child at Wave 1, KLoWF Wave 1 – 3, 2007, 2008, 2010 (N=463)

Variable	Percent
Fertility intention (yes)	51.03
Gave birth between Wave 1 and Wave 3 (or women pregnant at Wave 3)	41.21
Marital quality	
Dissatisfaction with division of housework and childcare	50.01
Low spousal relationship quality	23.89
Low marital happiness	21.30
Separation proneness (yes)	9.82
Wife's share of housework and childcare (mean)	
1 st quartile (62.39%)	28.12
2 nd quartile (82.64%)	22.67
3 rd quartile (92.78%)	25.05
4 th quartile (99.60%)	24.16
Responsibility for children's education	
Mostly wife's decision	46.61
Joint decision with the husband	53.39
Traditional gender role attitudes (yes)	42.20
Age	
Less than 30	32.90
30-34	37.70
35-40	29.40
Education (college +)	36.55
Husband's education (college +)	53.90
Wife's income share	
Unemployed	74.41
Less than 39%	13.03
39% or greater	12.56
Household income (lowest quartile)	33.11
Marital duration	
5 years or less	63.82
Above 5 years	36.18
Subjective health (very good)	27.65

Multivariate logistic regression models predicting marital quality

Table 8 presents the results of four models predicting four dimensions of women's marital quality: dissatisfaction with division of housework and childcare, spousal relationship quality, marital happiness, and separation proneness. I start with the dimension of marital quality that is directly associated with the division of housework and childcare. In line with my first hypothesis, an equal sharing of housework and childcare is associated with level of satisfaction. Compared to women who do all or nearly all of the housework and childcare, women who share duties with their husbands are significantly less likely to be dissatisfied with the division of housework and childcare. The odds ratio for being dissatisfied with the division of housework and childcare was as low as 0.06 when women's share of housework and childcare was in the lowest quartile. Even women whose share of housework and childcare was in the 3rd quartile (i.e., an average share of 93%) are 75% less likely to be dissatisfied with the division of housework and childcare than women in the reference group (i.e., the highest share of housework and childcare). All other factors being equal, women are least dissatisfied when they perform little housework and childcare. Responsibility for children's education has no effect on the dissatisfaction with the division of housework and childcare.

Is an unequal sharing of housework and childcare also associated with spousal relationship quality? Supporting H1, Table 8 shows a significant relationship between the sharing of housework and childcare and spousal relationship quality. Women whose share of housework and childcare is in the 2nd quartile (i.e., an average share of 83%) are significantly less likely to report low spousal relationship quality, compared to women who do nearly all of the housework and childcare. However, women whose share of housework and childcare is in the lowest or in the 3rd quartile do not show any significant difference in spousal relationship quality

from the reference group. This suggests that the effects of the relative share of housework and childcare are less clear for spousal relationship quality than for satisfaction with the division of housework and childcare. In contrast, responsibility for children's education also shows a significant effect on spousal relationship quality. Women who are mainly responsible for their child's education are nearly three times more likely to report low spousal relationship quality when compared with women who have joint responsibility with their husbands.

Next, I investigated the relationship between gender equity in the family and marital happiness. In line with H1, women whose share of housework and childcare is lower than the highest quartile are significantly less likely to report low marital happiness. Put differently, women who do nearly or all housework and childcare are substantially more prone to low marital happiness. In addition, women who take primary responsibility for their children's education are significantly more prone to low marital happiness. Women who are mostly responsible for the children's education are two times more likely to report low marital happiness. The more responsibility a woman takes for her children's education, the less marital happiness she reports.

Finally, the last model in Table 8 presents the analysis of separation proneness. Women's relative share of housework and childcare is correlated with separation proneness, as expected in H1. However, the coefficients are generally weaker than the coefficients for the other dimensions of marital quality. Wives whose share of housework and childcare is in the lowest or the second lowest quartile are less prone to separation from their husbands compared with women who do nearly all the housework and childcare. In contrast, women's taking primary responsibility for their children's education shows no significant correlation with women's separation proneness.

Women's attitudes toward the traditional breadwinner family model are not significantly associated with women's marital quality in any of the four models. This finding does not support

H1b.³⁵ A few control variables indicate sizeable associations with women's marital quality. Women's age has a significant relationship with spousal relationship quality. Women aged 35 or above are three times more likely to report low spousal relationship quality compared to women aged less than 30. Highly educated women are more likely to report dissatisfaction with the division of housework and childcare and low spousal relationship quality compared to women with no college education. By contrast, the husband's education produces the opposite effect. Women with highly educated husbands are less likely to be dissatisfied with the division of housework and childcare. Working women whose share of income is less than 39% are approximately two times more likely to be dissatisfied with the division of housework and childcare when compared to unemployed women. Low household income is positively associated with low spousal relationship quality. Marital duration is not significantly associated with any of the four dimensions of marital quality. Lastly, women's subjective health is only weakly associated with spousal relationship quality, and is not significantly associated with the other three dimensions of marital quality.

³⁵ Recent studies have suggested that the inconsistency between women's gender role attitudes and their actual practice (or behavior) may lead to dissatisfaction with family life (Forste and Fox 2012) or lowered childbearing (Goldscheider et al. 2013). So I also tested for inconsistency between women's attitudes toward the traditional breadwinner family model and their labor force participation, by constructing a dummy variable indicating 'congruence' or 'incongruence'. However, the results show no significant impact on marital quality or on fertility behavior (results not shown).

Table 8 Results of logistic regression analyses for variables predicting marital quality for married Korean women, age 40 or younger with parity one at Wave 1, KLoWF 2007 (N=463)

Variable	Dissatisfaction with the division of household labor, including childcare			Low spousal relationship quality			Low marital happiness			Separation proneness		
	B	S.E.	OR	B	S.E.	OR	B	S.E.	OR	B	S.E.	OR
Age (ref. less than 30)												
30-34	.25	.32	1.24	.52	.40	1.68	.11	.38	1.09	.71	.50	2.03
35-40	.09	.37	1.09	1.13	.45	3.09*	.46	.45	1.47	.05	.60	1.05
Education (college +)	.63	.33	1.68 ⁺	.87	.38	2.38*	.40	.40	1.56	.74	.52	2.01
Husband's education (college +)	-.60	.29	.52*	-.55	.34	.57	-.59	.39	.58	-.45	.48	.64
Wife's income share (ref. unemployed)												
Less than 39%	.90	.38	1.98*	.53	.43	1.70	.43	.43	1.46	.86	.53	2.36
39% or greater	.10	.43	.72	.57	.45	1.77	.44	.39	1.73	.88	.58	2.41
Household income (lowest quartile)	.15	.27	1.81	.73	.31	2.07*	-.37	.32	.67	.52	.39	1.69
Marital duration (5 years or less)	.42	.30	1.52	-.23	.32	.80	.31	.34	1.41	-.03	.46	.97
Subjective health (very good)	-.29	.28	.75	-.61	.35	.54 ⁺	-.45	.35	.61	-.74	.52	.48
Traditional gender role attitudes	.23	.25	1.25	-.05	.29	.95	.09	.30	1.10	-.41	.39	.66
Wife's share of housework and childcare (ref. highest quartile)												
Lowest quartile	-2.79	.40	.06***	-.46	.37	.63	-1.24	.38	.29***	-1.27	.54	.28*
2 nd quartile	-2.33	.39	.10***	-1.03	.39	.36**	-1.28	.41	.28**	-1.26	.54	.28*
3 rd quartile	-1.39	.39	.25***	-.30	.38	.74	-1.29	.39	.28***	-.52	.47	.60
Responsibility for children's education (mostly wife's decision)	.11	.25	1.12	1.08	.28	2.95***	.59	.29	2.02*	.56	.41	1.74
Constant	1.24	.52		-2.19	.58		-.93	.60		-2.30	.72	
McFadden's Adjusted R ²		.173			.135			.107			.104	

Note: ⁺ <.10; * p<0.05; ** p<0.01; *** p<0.001. S.E. denotes standard error. OR denotes odds ratio.

Multivariate logistic regression models predicting a second birth

In Table 9 I present the logistic regression results predicting the likelihood of having a second birth or being pregnant with a second child at Wave 3. I first focus on the influence of marital quality in explaining women's second births or being pregnant with a second child. Then I move on the effects of control variables. Each model tests the effects of a specific dimension of marital quality on the likelihood of childbirth.

Model 1 reveals that dissatisfaction with the division of housework and childcare has no significant effect on women's decision to have a second child. By contrast, the relative share of housework and childcare presents clearer effects. Compared with women who do all or nearly all of the housework and childcare, women whose share of housework and childcare is in the lowest quartile ($p < .10$) or in the 3rd quartile ($p < .01$) are significantly more likely to have a second child. Women whose relative share of housework and childcare is in the 2nd quartile are not significantly different from women in the reference group (i.e., relative share is in the highest quartile). Women primarily responsible for their children's education are less likely to have a second child compared to women who have a joint responsibility for their child's education with their husbands at the $p < .10$.

Next, Model 2 shows that low spousal relationship quality exhibits a negative association with the likelihood of a second birth at the $p < .10$ level ($OR = 0.55$). As found in Model 1, the wife's share of housework and childcare shows a significant effect on the likelihood of having a second child. Women whose share of housework and childcare is in the 3rd quartile are significantly more likely to have a second child compared with women who perform nearly or all housework and childcare. The odds of having a second child ($OR = 2.74$), including being pregnant with a second child, are highest for women who fall within the 3rd quartile regarding

relative share of housework and childcare. However, women's having primary responsibility for their children's education shows no significant impact on the likelihood of having a second child in this model.

In Model 3 I estimated the relationship between marital happiness and second births. Women who reported low marital happiness are less likely to have a second child, but this relationship is not statistically significant. In line with the two previous models, however, the wife's share of housework and childcare shows a significant influence on women's second births. In addition, women who are mainly responsible for their children's education are less likely to have a second child compared with women who have joint responsibility with their husbands for their children's education. Finally, in Model 4 I examined the effect of separation proneness on the likelihood of second births within 3 years after the initial interview. Women's separation proneness is not associated with second births when other variables are included in the model. This finding does not support H3. Again, women's share of housework and childcare exhibits a significant effect on the likelihood of second births. Therefore, as for second births, I conclude that women's marital quality has no significant effect, with the exception of spousal relationship quality at the $p < .10$ level. Hypothesis 3 is only weakly supported for spousal relationship.

As expected, women's fertility intention is a very strong predictor for the birth of a second child. Women with positive second birth intentions are about six times more likely to have a second child compared with women who have no positive intentions at Wave 1. Among other socio-demographic control variables, only two indicate significant association with the likelihood of having a second child. Women's age has a negative effect on the likelihood of having a second birth. Compared to women aged less than 30, women aged 35 or greater are significantly less likely to have a second child. Women who have been married for five years or

less are approximately two times more likely to have a second child compared to women who have been married longer than five years. Women's and their husbands' education, the wife's share of household income, household income, women's subjective health, and women's gender role attitudes do not show significant associations with the likelihood of having a second child. These findings are consistent across all four models.

Table 9 Logistic regression predicting the likelihood of childbirth by Wave 3 or in pregnancy at Wave 3 for married Korean women, age 40 or younger with parity one at Wave 1, KLoWF 2007, 2008, and 2010 (N=463)

Variable	Model 1			Model 2			Model 3			Model 4		
	B	S.E.	OR									
Age (ref. less than 30)												
30-34	-.22	.34	.80	-.18	.34	.84	-.23	.34	.80	-.19	.34	.83
35-40	1.50	.47	.22***	-1.44	.47	.24***	-1.51	.47	.22***	-1.51	.46	.22***
Education (college +)	-.17	.35	.85	-.09	.35	.91	-.18	.35	.84	-.13	.35	.87
Husband's education (college +)	.43	.34	1.54	.41	.33	1.51	.45	.34	1.56	.42	.33	1.52
Wife's income share (ref. unemployed)												
Less than 39%	-.45	.49	.64	-.47	.50	.63	-.46	.49	.63	-.46	.50	.63
39% or greater	-.24	.51	.78	-.25	.49	.78	-.24	.50	.79	.25	.51	.78
Household income (lowest quartile)	.26	.32	1.30	.32	.32	1.38	.28	.32	1.32	.27	.32	1.31
Marital duration (5 years or less)	.79	.34	2.21*	.81	.35	2.25*	.78	.34	2.17*	.79	.34	2.20*
Subjective health (very good)	.40	.29	1.49	.38	.29	1.46	.41	.29	1.50	.39	.29	1.47
Traditional gender role attitudes	.13	.29	1.14	.14	.29	1.15	.13	.29	1.14	.13	.29	1.13
Wife's share of housework and childcare (ref. highest quartile)												
Lowest quartile	.56	.44	1.76	.57	.41	1.76	.62	.41	1.86	.55	.41	1.73
2 nd quartile	.05	.47	1.05	-.03	.44	.97	.11	.46	1.12	.01	.45	1.01
3 rd quartile	1.01	.40	2.75*	1.01	.40	2.74*	1.06	.41	2.87**	1.01	.40	2.73*
Responsibility for children's education (mostly wife's decision)	-.52	.29	.59⁺	-.46	.29	.63	-.54	.29	.58⁺	-.50	.29	.61⁺
Marital quality												
Dissatisfied with the division of housework and childcare	-.06	.30	.94									
Low spousal relationship quality				-.59	.36	.55⁺						
Low marital happiness							.12	.36	1.13			
Separation proneness										-.52	.40	.59
Fertility intentions	1.76	.30	5.82***	1.73	.30	5.62***	1.78	.29	5.95***	1.76	.30	5.83***
Constant	-1.97	.69		-1.96	.64		-2.07	.64		-1.96	.64	
McFadden's Adjusted R ²		.299			.304			.299			.301	

Note: ⁺ <.10; * p<0.05; ** p<0.01; *** p<0.001. S.E. denotes standard error. OR denotes odds ratio.

DISCUSSION AND CONCLUSION

This chapter began with three hypotheses regarding the relationship between gender equity in the family and marital quality, and the influence of marital quality on the likelihood of having a second child. The analyses presented in this chapter show that gender equity in the family is significantly associated with marital quality. I measured gender equity in the family with two indicators, including the wife's relative share of housework and childcare and responsibility for child(ren)'s education. Contributing to the multidimensional approach to marital quality, I conceptualized marital quality as a multidimensional concept that encompasses both positive and negative, and both appraisal and behavioral aspects of the marital relationship with the husband. The following findings are consistent across all four dimensions of marital quality: satisfaction with the division of housework and childcare, spousal relationship quality, marital happiness, and separation proneness.

First, women's low share of housework and childcare is strongly associated with high marital quality. The less they do, the better. Hypothesis 1 receives strong support. On the contrary, Hypothesis 2, regarding the relationship between women's having primary responsibility for children's education and marital quality, receives partial support. It matters for spousal relationship quality and marital happiness only. Women who are mainly responsible for their children's education are more likely to have low spousal relationship quality and low marital happiness than women who have joint responsibility with their husbands. These findings provide support for the conclusion that women are more satisfied when they are not primarily responsible for a given household tasks, including household decision-making (e.g., Forste and Fox 2012). However, women's having main responsibility for children's education shows no significant association with dissatisfaction with the division of household labor and separation

proneness. Thus, this study contributes to a body of research suggesting that the relative share of household labor is associated with diverse dimensions of marital quality. Furthermore, while I identify gender equity in the family as a key determinant of marital quality in this context, I also find that the majority of variations in marital quality are not explained by these factors or socio-demographic factors.

Second, my findings do not support the link between gender role attitudes and marital quality found in Japan (e.g., Kaufman and Taniguchi 2009) or in the U.S. (e.g., Minnotte et al. 2010).³⁶ In their comparative studies, however, Greenstein (2009) and Forste and Fox (2012) found that there is no significant relationship between gender role attitudes and marital quality when they take into account national-level indicators such as levels of gender equity (e.g., Global Gender Gap) and economic development (e.g., HDI). With this in mind, my findings may imply that scholars should be very cautious about interpreting the meanings of gender role attitudes and how they work. The descriptive findings show that the majority of South Korean women perform more than half of the housework and childcare regardless of their employment status. Therefore, performing housework and childcare are very much expected and unavoidable tasks that “comes with the package” for married women. Given these cultural normative ideas about taking care of family as showing competency both as a mother and as a wife, agreement or disagreement with the breadwinner family model may not necessarily lead to significant differences in women’s marital quality. Future research exploring a new measure of gender role attitudes more relevant to marital quality for Korean women would help clarify the picture.

³⁶ I tested H2 with a different measure of gender role attitudes, a scale measure summing four items (alpha = .67) asking respondents’ opinion about family values: “It is ideal for man to earn money and for woman to take care of family,” “A preschool child is likely to suffer if his or her mother works,” “Dual-earner couples should equally share household labor,” and “A woman should work to make the marital relationship equal.” However, the results did not show any significant difference from the results that I discussed in this chapter.

Lastly, Hypothesis 3, concerning the effect of marital quality on the likelihood of having a second child, receives very weak support. Low spousal relationship quality negatively influences women's second births. However, other dimensions of women's marital quality do not significantly influence the likelihood of having a second child when controlling for socio-demographic factors and gender equity in the family. Instead, the findings suggest that gender equity in the family, especially the wife's share of housework and childcare plays an important role in having a second child. As expected, of course, women's fertility intentions exert a very strong effect on women's second births.

With regard to the effect of the wife's share of housework and childcare, women who are most likely to have a second child are those whose share of housework and childcare is in the 3rd quartile, compared to women who do nearly all housework and childcare. Interestingly, women whose share of housework and childcare is in the lowest or the second lowest quartiles show significant difference in terms of their likelihood of having a second child. This may be because these women who are in the 3rd quartile in terms of the relative share of housework and childcare are likely to be unemployed full-time mothers with husbands who are involved in housework and childcare to some extent. Given the relatively small difference in wives' share of housework and childcare from the reference group, husbands' time spent on housework and childcare would not be substantially different between the two groups. However, women may evaluate that small difference substantially differently, from being a negligible to non-negligible share.

The significance influence of low spousal relationship quality on women's second births may also reflect the level of husbands' involvement in the family. My measure of spousal relationship quality is mostly based on respondents' evaluations of positive interactions with their husbands. This suggests that more positive engagements with the husbands demonstrate a

higher marital quality and thus provide a favorable environment for having a second child. In turn, this suggests the importance of behavioral aspects of marital relationships based on men's involvement in the familial roles, both as husbands and as fathers, to marriage and childbearing decisions. As such, I believe this study adds to a substantial body of research demonstrating the importance of greater male involvement in the family on strengthening family and realizing fertility desires (e.g., Goldscheider et al. 2015).

One potential problem with this study, as discussed in other chapters as well, is the lack of direct information from the husbands of the women interviewed. Without such data I needed to rely on wives' account of husbands' contributions to household labor and childcare. Another possible shortcoming of the data is that I could not take into account men's perspectives on marital quality or their intention for having a second child. Rijken and Thomson (2011) found that women's marital quality and men's marital quality have different effects on fertility by parity. It is also possible that couples may have different intentions regarding having a second child. It would be fruitful to examine how the dynamics of both partners' fertility intentions and their appraisal of marital quality affect fertility outcomes. Moreover, further research is needed to consolidate the findings of this study in other non-Western settings. This study exclusively focused on women with one child. It would be valuable to examine the role of marital quality on the likelihood of having a first child among childless women in contexts where there exist a substantial proportion of childless couples.

My findings show that tangible support from husbands for household responsibilities (i.e., housework, childcare, and educational responsibility) is most important for women's marital quality. My findings also underscore the fact that specific dimensions of marital quality may be more closely tied to women's fertility decision-making process in South Korean context. I hope

my results will encourage future researchers to test the relationship between marital quality and childbearing in other Asian contexts. Overall, these findings reinforce the importance of gender equity in the family to women's higher marital quality and ultimately to second births. These findings provide strong support for the association between gender equity in the family and marital quality. This conclusion also buttresses my argument concerning the significance of gender equity in the family for the realization of fertility intentions for a second child as presented in Chapter 3.

CHAPTER 5

CONCLUSION

In this work, I examined the intersection of low fertility, marriage, and family with an emphasis on the role of gender equity in explaining lowest-low fertility in South Korea. Utilizing data from a panel survey, I have brought a new perspective to the growing body of literature on low fertility, a perspective that is especially suited to cultural contexts in which high educational aspirations and the traditional male breadwinner-female homemaker family model are pervasive. In this chapter, I discuss the key findings of my research and their contributions to the literature on low fertility. I conclude by providing an overview of the main limitations of this research and suggesting directions for future research.

SUMMARY OF KEY FINDINGS

The Importance of Different Sources of Family-Supportive Environments for Fertility

Recent theories of low fertility emphasize the increasing importance of family support for shifting gender roles toward egalitarianism (Esping-Andersen 2015; McDonald 2000a; 2000b). Many studies support this argument by showing the importance of institutional support, often referred to as national-level gender equity, for achieving compatibility between parenthood and labor force participation, especially for women. A comparative study of OECD countries by Thévenon (2011) reveals that a group of countries, including Japan and South Korea, demonstrate a deficit of policies enabling work and family balance. Thévenon (2011:64) further contends that Korea is markedly different even from the countries in the same group with regard to levels of state support for families, indicating that it “clearly lag[s] behind the other OECD countries, whichever type of support is considered.”

Given this background, I asked the following questions in chapter 2. In a context of weak institutional support for families and low levels of gender equity, do family policies influence individual fertility? Moreover, might support from other sources, such as men's involvement in the family or grandparental childcare assistance, positively influence fertility intentions and behavior? I examined the impact of family support for childbearing and childrearing from three sources – institutions, partners, and parents or in-laws – on women's fertility intentions and behavior concerning second children. Supportive environments for family from these three sources demonstrate stronger positive effects on actual fertility than on fertility intentions for second children. Women who are very familiar with family policy with regard to fathers' use of parental leave are more likely to have a second child than women who do not know about it at all. Support from husbands and grandparental childcare assistance increases the likelihood of second births.

These findings contribute to our theoretical understanding of the interplay between the welfare state and the family in studies of fertility. I highlighted the importance of the availability of other sources of support for family, such as husbands and grandparental childcare assistance. Moreover, my findings have unique implications for very low fertility in countries with limited and fragmented state support of families. In the following chapter, I paid particular attention to the effects of gender equity in the family, which I measured via men's involvement in the family.

Gender Equity in the Family and the Realization of Fertility Intentions

In chapter 3, I investigated whether gender equity within the family influences the realization of fertility desires within the context of institutional gender inequality. Given the institutional and cultural differences between Western contexts and South Korea, I tested the

influence of gender equity in the family on fertility, specifically the realization of fertility intentions for a second child. I posed the question of whether indications of higher gender equity in the family always have a positive impact on the realization of fertility intentions in South Korea, which have been marked by a relatively recent transition to low fertility and low gender equity regimes.

I found that women's gender role attitudes, husbands' housework, and women's responsibility for children's education influence the likelihood of realizing a second birth. My results highlight the importance of men's household contributions and women's educational responsibilities on the realization of fertility intentions within low fertility regimes. One of my unique contributions in chapter 4 is incorporating parental responsibility for children's education as an aspect of gender equity in the family. Integrating patterns of educational responsibility as a dimension of gender equity in the family also extends the gender equity literature. My findings indicate that the fertility impact of women's educational responsibility for their children interacts with women's domestic responsibilities for housework and childcare. I argue that over-reliance on mothers' educational responsibility may add another taxing facet to domestic responsibilities; and thus I expand our conventional understanding of the 'second shift' of housework and childcare.

The Relationship between Gender Equity in the Family, Marital Quality, and Fertility

Behavior

In chapter 4, I moved my theoretical focus to the association between gender equity in the family and women's marital quality, and their ultimate influence on women's fertility behavior. Research suggests that women in most industrialized countries, including the most gender-equal

societies, still perform more household responsibilities than their husbands. Moreover, there is evidence that women's relationship quality is more closely associated with the division of household labor than is men's relationship quality. I posed the question of whether gender equity in the family is associated with Korean women's marital quality. My results showed significant associations between gender equity in the family and women's marital quality. Four distinctive dimensions of marital quality – dissatisfaction with the division of household labor, spousal relationship quality, marital happiness, and separation proneness – are significantly associated with the wife's share of housework and childcare. Dissatisfaction with the division of household labor and marital happiness showed very strong associations.

I further asked whether this relationship between gender equity in the family and marital quality influenced women's second births during the three years since their initial response. In general, my findings showed no significant relationship between marital quality and women's second births, except in the dimension of spousal relationship quality. Women having low spousal relationship quality are significantly less likely to have a second child than women having high spousal relationship quality. In contrast to marital quality, gender equity in the family showed a more consistent influence on women's second births. Given that women whose relative shares of housework and childcare is in the 3rd quartile (2nd highest group) are more likely to have a second child compared with women who perform nearly or all the housework and childcare, these women are likely to be full-time mothers with supportive husbands. It is important to acknowledge that these husbands' involvement in housework and childcare may not be considered negligible by the women, even though the absolute hours spent by their husbands on housework and childcare is not high. These findings reinforce the importance of gender

equity in the family, meaning men's greater involvement in familial roles impacts South Korean women's birth of a second child.

THEORETICAL IMPLICATIONS

This research makes two main contributions to the literature on gender and low fertility. First, it demonstrates the mechanisms through which gender equity in the family shapes women's marriage and fertility, both in terms of fertility behaviors and in terms of the realization of fertility intentions. Second, it offers new insights on the interplay between the state and the family in achieving family demands, including work-family balance and having an additional child. It further increases our understanding of the different contexts that are revealed in a rapid fertility decline, lowest-low fertility, low gender equity regimes, and weak institutional support for childrearing.

Understanding the Role of Gender Equity

Studies building upon gender equity theory at the micro-level suggest that gender equity in the family is conducive to fertility intentions or fertility behaviors (Cooke 2009; Mills et al. 2008; Torr and Short 2004). However, there is relatively little evidence to test the link between gender equity and fertility in non-Western low fertility contexts. By examining four aspects of gender equity in the family, this case study of South Korea confirms and challenges the findings from European and North American cases. My findings suggest that South Korean women with traditional gender role attitudes may face high levels of pressure to fulfill their expected roles in the family, including raising a high-quality child, with no or little support from husbands and institutions.

Another unique contribution of this research is integrating patterns of educational responsibility as an aspect of gender equity in the family, thus extending gender equity literature. My findings indicate that women's educational responsibility for their children interacts with their domestic burdens of housework and childcare in terms of their effect on fertility. Women who are the main decision-makers for their children's education and who also bear substantial responsibility for housework and childcare demonstrate the lowest probability of realizing their fertility intentions. These findings open up new areas of inquiry and challenge previous studies in high fertility settings, as mothers' educational responsibility for their children can be an additional domestic burden. This expands our conventional understanding of the "second shift" of housework and childcare, which is particularly relevant in the context of low gender equity and high educational aspirations. Thus, this speaks to the literature linking gender equity and fertility and suggests an area for more male involvement in the family as a powerful pathway to increasing fertility in very low fertility countries.

Importantly, this research suggests that gender equity in the family is significantly associated with women's marital quality. Building upon the multidimensional approach to marital quality, I measured marital quality via the following four aspects: satisfaction with the division of housework and childcare, spousal relationship quality, marital happiness, and separation proneness. My analyses showed that the share of housework and childcare between couples is strongly associated with all four aspects of marital quality. Furthermore, patterns of educational responsibility are associated with women's spousal relationship quality and marital happiness. Overall, this suggests that women's positive interactions with their husbands, based on the sharing of housework and childcare or educational responsibility for their children, provide favorable conditions for women's marital quality.

The Interplay between the State and the Family

One important factor that a handful of researchers have highlighted to explain differences in fertility rates across countries is institutional intervention which improves compatibility between parenthood and labor force participation (also referred to as institutional-level gender equity). Comparative studies have shown the positive influence of institutional support for families on national fertility rates (Anderson and Kohler 2015; Esping-Andersen and Billari 2015; Gauthier 2007; McDonald 2000a; 2013; Thévenon 2011). This growing area of research leaves open the question of how people find sources of support for their families' needs in countries with limited state support to families. While previous studies at the micro level have examined the role of husbands' involvement in housework and childcare or support from grandparental childcare on fertility, they often examined a single source of support.

My research demonstrates the positive effects of a supportive environment for the family on fertility behavior. Existing studies suggest that family policy exerts a small positive influence on fertility (e.g., Gauthier 2007). Based on women's knowledge of parental leave policy, this research suggests that Koreans receiving support from the state may be largely constrained by a lack of information, restrictive government policies, and gender inequality. These multiple constraints operate as a barrier for families considering an additional child. Given the relatively low awareness of the policy among mothers of a single child, the findings suggest that the failure of the welfare state may be more closely associated with policies' ease of use than with the actual availability of support. Regarding the positive effect on fertility of support from grandparental childcare assistance, my findings are consistent with previous findings observed in Europe (Bühler and Philipov 2005; Hank and Kreyenfeld 2003; Rijken and Liefbroer 2009; Thomese and Liefbroer 2013). Within the context of limited support for families by the state, as well as

low male involvement in family care, this research suggests that grandparental childcare assistance is a significant source of support for families. Thus, this research fills in the gap in existing literature by integrating three sources of supportive environments for family and examining their effects on women's fertility.

This research also suggests the interplay between the welfare state and the family that may occur in low fertility countries with limited state support. Consistent with the previous findings from Europe (e.g., Thomese and Liefbroer 2013), my findings suggest that grandparental childcare assistance is an important supplementary source of support for families in South Korea. I argue that support from husbands or grandparents does not supplement support from institutions in the context where state support is "limited and highly fragmented" (Thévenon 2011). This context provides an unfavorable environment for mothers' participation in the labor force. Moreover, South Korea ranks second in the number of hours worked among 36 OECD countries, following Mexico (OECD 2016).³⁷ In 2014, South Korean workers worked 2124 hours per year³⁸, which corresponds to 41 hours per week. These long hours worked are likely to restrict fathers' participation in housework and childcare, which, in turn, may lead mothers to rely on support from their extended family, usually grandmothers, on a regular basis.

The intertwined link between three sources of support for family raises concerns about the possible consequences of the *low gender equity trap*, which keeps increasing the family's responsibilities over the life course. The state support for families in South Korea is characterized by a "one-time remedy" for a few life transitions instead of long-term reliable support. In this context, Korean families experience increasing challenges to balance work and

³⁷ OECD (2016), Hours worked (indicator). doi: 10.1787/47be1c78-en (Accessed on 24 February 2016)

³⁸ This average annual hours worked is calculated by taking "the total number of hours actually worked per year divided by the average number of people in employment per year". Actual hours worked include regular work hours of full-time, part-time and part-year workers, paid and unpaid overtime, and hours worked in additional jobs (OECD, 2016).

family and to meet family needs over the life course, especially after marriage. The analyses from three substantive chapters reinforce the importance of increasing male involvement in the family in terms of housework, childcare, and educational responsibility. These findings support Goldscheider and her colleagues' (2015) argument about the positive impact of male involvement in the family, as the second half of the gender revolution, in strengthening the family. Of course, men's increased involvement in the family is crucial to boosting fertility. However, it may be challenging for families to receive support from husbands and grandparents without stable state support. In the context of limited and fragmented state support, families must take care of all needs by themselves, in isolation from the state and the market. The heart of the problem is that these institutions, which have operated as a driving force for compressed modernity in South Korea (Chang 2010), do not function effectively in meeting the needs of society or individual families. Overall, this demands an effort from the state and the market employment to cooperate with each other in creating egalitarian relationships and policies (Esping-Andersen and Billari 2015; Kaufman and Bernhardt 2012).

LIMITATIONS & DIRECTIONS FOR FUTURE RESEARCH

One of the greatest challenges of studying fertility in South Korea is a lack of data including male respondents. Increasing amounts of literature on low fertility emphasize the male role in increasing fertility. However, many datasets that I reviewed for this research included only female respondents. This may be due to the social prejudice that low fertility is only a woman's issue. Although the data I used for this research provided an exceptional opportunity for a deeper analysis of women's attitudes, practices surrounding family and marriage, and their fertility history, one huge limitation I faced was the lack of men's voices. I assessed men's participation

in housework and childcare based on women's estimates of their husband's contributions, and that may be biased.

The lack of men's voice also may contribute to the unexplained difference between fertility intentions and behavior. Men may have different childbearing plans from their wives, so couples may disagree on their childbearing plans. This possibility was excluded from my research. A further problem with the survey data, with regard to this particular research, was the limited time frame of a three-year period. Due to the availability of the datasets, I had to rely on the three waves of the KLoWF, which only covers three years. This is a possible factor that may lead to a gap between fertility intentions and behavior. Although the national average of birth spacing between first and the second births does not exceed three years, some couples may postpone their childbearing even if they intend to have a second child. A closer examination of the relationship between fertility intentions and behavior with a longer time frame would merit additional attention.

Another limitation of my study is that the respondents in my analytic sample share homogeneous characteristics (e.g., all married). As I mentioned in earlier chapters, selection effects are a concern. Future research involving a more heterogeneous sample in terms of respondents' partnership status may provide different findings. Park and Raymo (2013) showed that divorce has been increasing in South Korea. The proportion of marriages ending within 5 years of marital duration increased more than doubled from 5% for the 1991 marriage cohort to 12% for the 2001 marriage cohort. They further revealed educational gradients in divorce by showing that less educated women (i.e., those who did not complete high school) face a greater risk of divorce than highly educated people. Educational gradients in divorce may also be associated with issues of gender equity, as my findings show that women who are mainly

responsible for housework and childcare as well as educational responsibility report lower marital quality and show the lowest probability of having a second child. These theoretical connections with marital instability would be a meaningful starting point for future research.

Furthermore, a qualitative study might shed more light on how women shape childbearing plans and could explore other factors in fertility decision-making which were not examined in this research. My research demonstrates the need for understanding the complex ways women shape their fertility intentions and what guides their decisions. It is important to understand when women consciously plan and intend behavior and when they do not. My research showed that gender equity in the family provides a favorable condition for women to realize their fertility intentions. At the same time, this study addressed the possible consequences of increasing family burdens in the context of low gender equity and low state support. Studying low fertility in similar institutional contexts allows us to uncover possible mechanisms of low fertility and explore new determinants of fertility which may not work in Western contexts that are characterized by high gender equity and long-term low fertility rates. The South Korean context, characterized by a rapid fertility decline, lowest-low fertility, low gender equity regimes, and weak institutional support for childrearing, has the potential to make particular contributions to the theories of low fertility and gender equity. On a related note, the experiences of South Korea highlight the need for further research examining Asian low fertility cases that share similar cultural and institutional backgrounds, thus helping to expand the current literature on low fertility and on gender equity more broadly.

I view this research as an early step toward understanding the mechanism of low fertility by studying a non-Western lowest-low fertility country. This case is distinctive from the cases of Europe or North America not only in terms of the speed and magnitude of fertility decline, but

also in terms of low gender equity regimes and weak institutional support for families. I have explored the unique aspects of gender equity in South Korean families to highlight the relationships between gender equity, family, and the state. My analyses emphasized that having a second child is likely to be a constrained choice dependent on supportive environments for the family. The availability of tangible support from multiple sources may determine the gap between fertility intentions and fertility behavior, especially in contexts where two-child family ideals are still pervasive. My findings add an additional layer of complexity to the relationship between gender equity and fertility by showing the need for support from both institutions and from husbands in the matter of fertility increases. It is important to note that increasing the aggregate-level fertility levels is not only an issue of policy, but also an issue for families in realizing their childbearing plans. I believe this research will advance sociology and social demography theoretically and inspire scholars of low fertility to expand the current literature by studying emerging areas of low fertility for a deeper understanding of the mechanisms of low fertility.

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